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TABLES OF SQUARES

Containing

THE TRUE SQUARE

of

EVERY FOOT AND FRACTION THEREOF

FROM 0 TO 100 FEET

Advancing by One-Sixteenth of an Inch.

by

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622 West Fifty-Eighth Street.
CHICAGO.

SECOND COPY,
1899.

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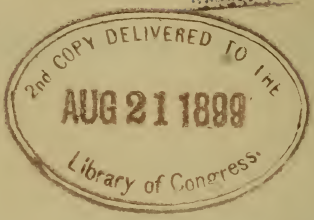

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PREFACE.

THIS little volume owes its inception to a similar, though less extensive, work by Mr. E. Buchanan, whose tables of squares have come to be regarded as almost, if not quite indispensable to the structural iron draughtsman. This is in no sense a copy of the older work, however, either in matter, form or method, as a comparison of the two will readily show.

Mr. B. takes for the basis of his tables the approximate 4-place decimal equivalent for each fraction of a foot; the resulting squares if absolutely accurate to the 8th decimal place yet, by reason of the inexactness of the roots employed, differ from the true squares in eleven cases out of every twelve, and frequently at the second or third decimal place.

The present tables obviate this error by squaring the fraction first, then reducing to decimal form.

The inclusion of squares from 50 to 100 feet, now published for the first time, and the notes on the relation of the squares, will, it is believed, enhance the value of the book.

The author bespeaks for the results of his labor whatever recognition their merits may warrant.

Chicago, July, 1899.

INTRODUCTORY.

ONE-SIXTEENTH of an inch $= \frac{1}{192}$ of a foot $(\frac{1}{192})^2 = \frac{1}{36864} = .000027126736 1 \ldots\ldots 1$. This decimal fraction, then, represents the part of a square foot which is equal to the square of one-sixteenth of an inch. In other words it is the second power of one sixteenth of an inch expressed decimally in square feet.

Calling the above decimal a^2, the corresponding expression for the square of *any number of sixteenths* of an inch as x equals $a^2\ x^2$.

For example: $(3' - 4\frac{13}{16}'')^2 = (\frac{493}{16})^2 = a^2\ x^2$. $x = 493$ $a^2\ x^2 = 11.567084418402 7 \ldots\ldots 7$.

The value of a^2 having been accurately determined as above, if we assume for the value of x the numbers 1, 2, 3, 4, etc., consecutively, the squares may be derived by the simple process of addition, as will be seen from the following:

TABLE OF DIFFERENCES.

Values of X.	The Squares.	1st Difference.	2d Difference.
1	a^2		
		$3a^2$	
2	$4a^2$		$2a^2$
		$5a^2$	
3	$9a^2$		$2a^2$
		$7a^2$	
4	$16a^2$		$2a^2$
		$9a^2$	
5	$25a^2$		

Several of the tables were actually derived in this manner, the results being extended to 13 decimal places. Each decimal was found to terminate in a *simple repetend.*

RELATIONS OF THE REPETEND.

Figures. Preceding.	Repetend Figures.	In Squares of	Repetend Occurs First at
625	0	Odd Sixteenths.	13th place.
		" Eighths.	11th "
736	1	" Quarters.	9th "
		" Halves.	7th "
069	4	" Inches.	5th "
		" Pairs.	3rd "
402	7	" Fours.	1st "

Comparing the digits in the 13th place, it was found to contain in regular rotation two significant figures and one zero, forming a series of nine figures, which are repeated over and over, thus:—

1 4 0 7 7 0 4 1 0

This lead to further comparisons, which discovered the following :

DECIMAL SERIES.

Place.	Number of Figs. in Series.	1st Series Complete at Square of
13th	9	$0'-0\frac{9}{16}''$
12th } 11th }	18	$0'-1\frac{1}{8}''$
10th	36	$0'-2\frac{1}{4}''$
9th	72	$0'-4\frac{1}{2}''$
8th	144	$0'-9''$
7th	288	$1'-6''$
6th	576	$3'-0''$
5th	1152	$6'-0''$
4th	2304	$12'-0''$
3rd	4608	$24'-0''$
2nd	9216	$48'-0''$
1st	18432	$96'-0''$

To avoid a useless multiplicity of figures the tables show six places only, —a unit being added in the 6th place if the figure in 7th place would be 5 or upward.

As a result of the series al-

ready noted there will be found throughout the tables the following :

This suggests a ready means of squaring larger roots than any found in the tables, thus :

Take 4 times the square of ½ the root, or 9 times the square of ⅓ the root, or 16 times the square of ¼ the root, and correct the decimal figures by comparison with the square of *the root diminished by 96′–0″ or some multiple thereof.*

RECURRENCE OF FIGURES.

Roots Differing by	Squares Have Same Figure in Places Marked X					
	1st Place.	2nd Place.	3rd Place.	4th Place.	5th Place.	6th Place.
3′–0″						X
6′–0″					X	X
12′–0″				X	X	X
24′–0″			X	X	X	X
48′–0″		X	X	X	X	X
96′–0″	X	X	X	X	X	X

Example 1.—Find the square of 183′–3⅛″.

Half the root=91′–$7\frac{9}{16}$″, whose square = 8396.095079

4

Answer, 33584.380316

183′-3⅛″—96′-0″=87′-3⅛″, whose square= 7614.380317

Corrected Answer, 33584.380317

Example 2.

$(252'-9\frac{15}{16}'')^2 = (84'-3\frac{5}{16}'')^2 \times 9 = 63922.060791$

$(252'-9\frac{15}{16}''-192'-0'')^2 = (60'-9\frac{15}{16}'')^2 = 3700.060791$

The tables were computed and composed in such an order as to retain all the recurring figures possible, thus reducing to a minimum the chance of errors in copying. Then after the proofs were read and corrected and the plates electrotyped, the tables were checked by multiplying each square by 4 and comparing with the square of twice the root. All errors were then corrected in the plates before going to press.

16ths	0′–0″	0′–1″	0′–2″	0′–3″	0′–4″	0′–5″
0	.000000	.006944	.027778	.062500	.111111	.173611
1	.000027	.007840	.029541	.065131	.114610	.177979
2	.000109	.008789	.031359	.067817	.118164	.182400
3	.000244	.009793	.033230	.070557	.121772	.186876
4	.000434	.010851	.035156	.073351	.125434	.191406
5	.000678	.011963	.037137	.076199	.129150	.195991
6	.000977	.013129	.039171	.079102	.132921	.200629
7	.001329	.014350	.041260	.082058	.136746	.205322
8	.001736	.015625	.043403	.085069	.140625	.210069
9	.002197	.016954	.045600	.088135	.144558	.214871
10	.002713	.018338	.047852	.091254	.148546	.219727
11	.003282	.019775	.050157	.094428	.152588	.224637
12	.003906	.021267	.052517	.097656	.156684	.229601
13	.004584	.022814	.054932	.100939	.160834	.234619
14	.005317	.024414	.057400	.104275	.165039	.239692
15	.006104	.026069	.059923	.107666	.169298	.244819

16ths	0′–6″	0′–7″	0′–8″	0′–9″	0′–10″	0′–11″
0	.250000	.340278	.444444	.562500	.694444	.840278
1	.255235	.346381	.451416	.570340	.703152	.849854
2	.260525	.352539	.458442	.578234	.711914	.859484
3	.265869	.358751	.465522	.586182	.720730	.869168
4	.271267	.365017	.472656	.594184	.729601	.878906
5	.276720	.371338	.479845	.602241	.738525	.888699
6	.282227	.377713	.487088	.610352	.747504	.898546
7	.287788	.384142	.494385	.618517	.756538	.908447
8	.293403	.390625	.501736	.626736	.765625	.918403
9	.299072	.397163	.509142	.635010	.774767	.928413
10	.304795	.403754	.516602	.643338	.783963	.938477
11	.310574	.410400	.524116	.651720	.793213	.948595
12	.316406	.417101	.531684	.660156	.802517	.958767
13	.322293	.423855	.539307	.668647	.811876	.968994
14	.328234	.430664	.546984	.677192	.821289	.979275
15	.334229	.437527	.554715	.685791	.830756	.989610

16ths	1′–0″	1′–1″	1′–2″	1′–3″	1′–4″	1′–5″
0	1.000000	1.173611	1.361111	1.562500	1.777778	2.006944
1	1.010444	1.184923	1.373291	1.575548	1.791694	2.021729
2	1.020942	1.196289	1.385525	1.588650	1.805664	2.036567
3	1.031494	1.207709	1.397814	1.601807	1.819689	2.051459
4	1.042101	1.219184	1.410156	1.615017	1.833767	2.066406
5	1.052762	1.230713	1.422553	1.628282	1.847900	2.081407
6	1.063477	1.242296	1.435004	1.641602	1.862038	2.096463
7	1.074246	1.253933	1.447510	1.654975	1.876329	2.111572
8	1.085069	1.265625	1.460069	1.668403	1.890625	2.126736
9	1.095947	1.277371	1.472683	1.681885	1.904975	2.141954
10	1.106879	1.289171	1.485352	1.695421	1.919379	2.157227
11	1.117866	1.301025	1.498074	1.709012	1.933838	2.172553
12	1.128906	1.312934	1.510851	1.722656	1.948351	2.187934
13	1.140001	1.324897	1.523682	1.736355	1.962918	2.203369
14	1.151150	1.336914	1.536567	1.750109	1.977539	2.218859
15	1.162354	1.348985	1.549506	1.763916	1.992215	2.234402

16ths	1′–6″	1′–7″	1′–8″	1′–9″	1′–10″	1′–11″
0	2.250000	2.506944	2.777778	3.062500	3.361111	3.673611
1	2.265652	2.523465	2.795166	3.080756	3.380235	3.693604
2	2.281359	2.540039	2.812609	3.099067	3.399414	3.713650
3	2.297119	2.556668	2.830105	3.117432	3.418647	3.733751
4	2.312934	2.573351	2.847656	3.135851	3.437934	3.753906
5	2.328803	2.590088	2.865262	3.154324	3.457275	3.774116
6	2.344727	2.606879	2.882921	3.172852	3.476671	3.794379
7	2.360704	2.623725	2.900635	3.191433	3.496121	3.814697
8	2.376736	2.640625	2.918403	3.210069	3.515625	3.835069
9	2.392822	2.657579	2.936225	3.228760	3.535183	3.855496
10	2.408963	2.674588	2.954102	3.247504	3.554796	3.875977
11	2.425157	2.691650	2.972032	3.266303	3.574463	3.896512
12	2.441406	2.708767	2.990017	3.285156	3.594184	3.917101
13	2.457709	2.725939	3.008057	3.304064	3.613959	3.937744
14	2.474067	2.743164	3.026150	3.323025	3.633789	3.958442
15	2.490479	2.760444	3.044298	3.342041	3.653673	3.979194

16ths	2′–0″	2′–1″	2′–2″	2′–3″	2′–4″	2′–5″
0	4.000000	4.340278	4.694444	5.062500	5.444444	5.840278
1	4.020860	4.362006	4.717041	5.085965	5.468777	5.865479
2	4.041775	4.383789	4.739692	5.109484	5.493164	5.890734
3	4.062744	4.405626	4.762397	5.133057	5.517605	5.916043
4	4.083767	4.427517	4.785156	5.156684	5.542101	5.941406
5	4.104845	4.449463	4.807970	5.180366	5.566650	5 966824
6	4.125977	4.471463	4.830838	5.204102	5.591254	5.992296
7	4.147163	4.493517	4.853760	5.227892	5 615913	6.017822
8	4.168403	4.515625	4.876736	5.251736	5.640625	6.043403
9	4.189697	4.537788	4.899767	5.275635	5.665392	6.069038
10	4.211046	4.560004	4.922852	5.299588	5.690213	6.094727
11	4.232449	4.582275	4.945991	5.323595	5.715088	6.120470
12	4.253906	4.604601	4.969184	5.347656	5.740017	6.146267
13	4.275418	4.626980	4.992432	5.371772	5.765001	6.172119
14	4.296984	4.649414	5.015734	5.395942	5.790039	6.198025
15	4.318604	4.671902	5.039090	5.420166	5 815131	6.223985

16ths	2′–6″	2′–7″	2′–8″	2′–9″	2′–10″	2′–11″
0	6.250000	6.673611	7.111111	7.562500	8.027778	8.506944
1	6.276069	6.700548	7.138916	7.591173	8.057319	8.537354
2	6.302192	6.727539	7.166775	7.619900	8.086914	8.567817
3	6.328369	6.754584	7.194689	7.648682	8.116564	8.598334
4	6.354601	6.781684	7.222656	7.677517	8.146267	8.628906
5	6.380887	6.808838	7.250678	7.706407	8.176025	8.659532
6	6.407227	6.836046	7.278754	7.735352	8.205838	8.690213
7	6.433621	6.863308	7.306885	7.764350	8.235704	8.720947
8	6.460069	6.890625	7.335069	7.793403	8.265625	8.751736
9	6.486572	6.917996	7.363308	7.822510	8.295600	8.782579
10	6.513129	6.945421	7.391602	7.851671	8.325629	8.813477
11	6.539741	6.972900	7.419949	7.880887	8.355713	8.844428
12	6.566406	7.000434	7.448351	7.910156	8.385851	8.875434
13	6.593126	7.028022	7.476807	7.939480	8.416043	8.906494
14	6.619900	7.055664	7.505317	7.968859	8.446289	8.937609
15	6.646729	7.083360	7.533881	7.998291	8.476590	8.968777

16ths	3′–0″	3′–1″	3′–2″	3′–3″	3′–4″	3′–5″
0	9.000000	9.506944	10.027778	10.562500	11.111111	11.673611
1	9.031277	9.539090	10.060791	10.596381	11.145860	11.709229
2	9.062609	9.571289	10.093859	10.630317	11.180664	11.744900
3	9.093994	9.603543	10.126980	10.664307	11.215522	11.780626
4	9.125434	9.635851	10.160156	10.698351	11.250434	11.816406
5	9.156928	9.668213	10.193387	10.732449	11.285400	11.852241
6	9.188477	9.700629	10.226671	10.766602	11.320421	11.888129
7	9.220079	9.733100	10.260010	10.800808	11.355496	11.924072
8	9.251736	9.765625	10.293403	10.835069	11.390625	11.960069
9	9.283447	9.798204	10.326850	10.869385	11.425308	11.996121
10	9.315213	9.830838	10.360352	10.903754	11.461046	12.032227
11	9.347032	9.863525	10 393907	10.938178	11.496338	12.068387
12	9.378906	9.896267	10.427517	10.972656	11.531684	12.104601
13	9.410834	9.929064	10.461182	11.007189	11.567084	12.140869
14	9.442817	9.961914	10.494900	11.041775	11.602539	12.177192
15	9.474854	9.994819	10.528673	11.076416	11.638043	12.213569

16ths	3′–6″	3′–7″	3′–8″	3′–9″	3′–10″	3′–11″
0	12.250000	12.840278	13.444444	14.062500	14.694444	15.340278
1	12.286485	12.877631	13.482666	14.101590	14.734402	15.381104
2	12.323025	12.915039	13.520942	14.140734	14.774414	15.421984
3	12.359619	12.952501	13.559272	14.179932	14.814480	15.462918
4	12.396267	12.990017	13.597656	14.219184	14.854601	15.503906
5	12.432970	13.027588	13.636095	14.258491	14.894775	15.544949
6	12.469727	13.065213	13.674588	14.297852	14.935004	15.586046
7	12.506538	13.102892	13.713135	14.337267	14.975288	15.627197
8	12.543403	13.140625	13.751736	14.376736	15.015625	15.668403
9	12.580322	13.178413	13.790392	14.416260	15.056017	15.709663
10	12.617296	13.216254	13.829102	14.455838	15.096463	15.750977
11	12.654324	13.254150	13.867866	14.495470	15.136963	15.792345
12	12.691406	13.292101	13.906684	14.535156	15.177517	15.833767
13	12.728543	13.330105	13.945557	14.574897	15.218126	15.875244
14	12.765734	13.368164	13.984484	14.614692	15.258789	15.916775
15	12.802979	13.406277	14.023465	14.654541	15.299506	15.958360

16ths	4′-0″	4′-1″	4′-2″	4′-3″	4′-4″	4′-5″
0	16.000000	16.673611	17.361111	18.062500	18.777778	19.506944
1	16.041694	16.716173	17.404541	18.106798	18.822944	19.552979
2	16.083442	16.758789	17.448025	18.151150	18.868164	19.599067
3	16.125244	16.801459	17.491564	18.195557	18.913439	19.645209
4	16.167101	16.844184	17.535156	18.240017	18.958767	19.691406
5	16.209012	16.886963	17.578803	18.284532	19.004150	19.737657
6	16.250977	16.929796	17.622504	18.329102	19.049583	19.783963
7	16.292996	16.972683	17.666260	18.373725	19.095079	19.830322
8	16.335069	17.015625	17.710069	18.418403	19.140625	19.876736
9	16 377197	17.058621	17.753933	18.463135	19.186225	19.923204
10	16.419379	17.101671	17.797852	18.507921	19.231879	19.969727
11	16.461616	17.144775	17.841824	18.552762	19.277588	20.016303
12	16.503906	17.187934	17.885851	18.597656	19.323351	20.062934
13	16.546251	17.231147	17.929932	18.642605	19.369163	20.109619
14	16.588650	17.274414	17.974067	18.687609	19.415039	20.156359
15	16.631104	17.317735	18.018256	18.732666	19.460965	20.203152

16ths	4′–6″	4′–7″	4′–8″	4′–9″	4′–10″	4′–11″
0	20.250000	21.006944	21.777778	22.562500	23.361111	24.173611
1	20.296902	21.054715	21.826416	22.612006	23.411485	24.224854
2	20.343859	21.102539	21.875109	22.661567	23.461914	24.276150
3	20.390869	21.150418	21.923855	22.711182	23.512397	24.327501
4	20.437934	21.198351	21.972656	22.760851	23.562934	24.378906
5	20.485053	21.246338	22.021512	22.810574	23.613525	24.430366
6	20.532227	21.294379	22.070421	22.860352	23.664171	24.481879
7	20.579454	21.342475	22.119385	22.910183	23.714871	24.533447
8	20.626736	21.390625	22.168403	22.960069	23.765625	24.585069
9	20.674072	21.438829	22.217475	23.010010	23.816433	24.636746
10	20.721463	21.487088	22.266602	23.060004	23.867296	24.688477
11	20.768907	21.535400	22.315782	23.110053	23.918213	24.740262
12	20.816406	21.583767	22.365017	23.160156	23.969184	24.792101
13	20.863959	21.632189	22.414307	23.210314	24.020209	24.843994
14	20.911567	21.680664	22.463650	23.260525	24.071289	24.895942
15	20.959229	21.729194	22.513048	23.310791	24.122423	24.947944

16ths	5′–0″	5′–1″	5′–2″	5′–3″	5′–4″	5′–5″
0	25.000000	25.840278	26.694444	27.562500	28.444444	29.340278
1	25.052110	25.893256	26.748291	27.617215	28.500027	29.396729
2	25.104275	25.946289	26.802192	27.671984	28.555664	29.453234
3	25.156494	25.999376	26.856147	27.726807	28.611355	29.509793
4	25.208767	26.052517	26.910156	27.781684	28.667101	29.566406
5	25.261095	26.105713	26.964220	27.836616	28.722900	29.623074
6	25.313477	26.158963	27.018338	27.891602	28.778754	29.679796
7	25.365913	26.212267	27.072510	27.946642	28.834663	29.736572
8	25.418403	26.265625	27.126736	28.001736	28.890625	29.793403
9	25.470947	26.319038	27.181017	28.056885	28.946642	29.850288
10	25.523546	26.372504	27.235352	28.112088	29.002713	29.907227
11	25.576199	26.426025	27.289741	28.167345	29.058838	29.964220
12	25.628906	26.479601	27.344184	28.222656	29.115017	30.021267
13	25.681668	26.533230	27.398682	28.278022	29.171251	30.078369
14	25.734484	26.586914	27.453234	28.333442	29.227539	30.135525
15	25.787354	26.640652	27.507840	28.388916	29.283881	30.192735

16ths	5′–6″	5′–7″	5′–8″	5′–9″	5′–10″	5′–11″
0	30.250000	31.173611	32.111111	33.062500	34.027778	35.006944
1	30.307319	31.231798	32.170166	33.122423	34.088569	35.068604
2	30.364692	31.290039	32.229275	33.182400	34.149414	35.130317
3	30.422119	31.348334	32.288439	33.242432	34.210314	35.192084
4	30.479601	31.406684	32.347656	33.302517	34.271267	35.253906
5	30.537137	31.465088	32.406928	33.362657	34.332275	35.315782
6	30.594727	31.523546	32.466254	33.422852	34.393338	35.377713
7	30.652371	31.582058	32.525635	33.483100	34.454454	35.439697
8	30.710069	31.640625	32.585069	33.543403	34.515625	35.501736
9	30.767822	31.699246	32.644558	33.603760	34.576850	35.563829
10	30.825629	31.757921	32.704102	33.664171	34.638129	35.625977
11	30.883491	31.816650	32.763699	33.724637	34.699463	35.688178
12	30.941406	31.875434	32.823351	33.785156	34.760851	35.750434
13	30.999376	31.934272	32.883057	33.845730	34.822293	35.812744
14	31.057400	31.993164	32.942817	33.906359	34.883789	35.875109
15	31.115479	32.052110	33.002631	33.967041	34.945340	35.937527

16ths	6′–0″	6′–1″	6′–2″	6′–3″	6′–4″	6′–5″
0	36.000000	37.006944	38.027778	39.062500	40.111111	41.173611
1	36.062527	37.070340	38.092041	39.127631	40.177110	41.240479
2	36.125109	37.133789	38.156359	39.192817	40.243164	41.307400
3	36.187744	37.197293	38.220730	39.258057	40.309272	41.374376
4	36.250434	37.260851	38.285156	39.323351	40.375434	41.441406
5	36.313178	37.324463	38.349637	39.388699	40.441650	41.508491
6	36.375977	37.388129	38.414171	39.454102	40.507921	41.575629
7	36.438829	37.451850	38.478760	39.519558	40.574246	41.642822
8	36.501736	37.515625	38.543403	39.585069	40.640625	41.710069
9	36.564697	37.579454	38.608100	39.650635	40.707058	41.777371
10	36.627713	37.643338	38.672852	39.716254	40.773546	41.844727
11	36.690782	37.707275	38.737657	39.781928	40.840088	41.912137
12	36.753906	37.771267	38.802517	39.847656	40.906684	41.979601
13	36.817084	37.835314	38.867432	39.913439	40.973334	42.047119
14	36.880317	37.899414	38.932400	39.979275	41.040039	42.114692
15	36.943604	37.963569	38.997423	40.045166	41.106798	42.182319

16ths	6′–6″	6′–7″	6′–8″	6′–9″	6′–10″	6′–11″
0	42.250000	43.340278	44.444444	45.562500	46.694444	47.840278
1	42.317735	43.408881	44.513916	45.632840	46.765652	47.912354
2	42.385525	43.477539	44.583442	45.703234	46.836914	47.984484
3	42.453369	43.546251	44.653022	45.773682	46.908230	48.056668
4	42.521267	43.615017	44.722656	45.844184	46.979601	48.128906
5	42.589220	43.683838	44.792345	45.914741	47.051025	48.201199
6	42.657227	43.752713	44.862088	45.985352	47.122504	48.273546
7	42.725288	43.821642	44.931885	46.056017	47.194038	48.345947
8	42.793403	43.890625	45.001736	46.126736	47.265625	48.418403
9	42.861572	43.959663	45.071642	46.197510	47.337267	48.490913
10	42.929796	44.028754	45.141602	46.268338	47.408963	48.563477
11	42.998074	44.097900	45.211616	46.339220	47.480713	48.636095
12	43.066406	44.167101	45.281684	46.410156	47.552517	48.708767
13	43.134793	44.236355	45.351807	46.481147	47.624376	48.781494
14	43.203234	44.305664	45.421984	46.552192	47.696289	48.854275
15	43.271729	44.375027	45.492215	46.623291	47.768256	48.927110

16ths	7′–0″	7′–1″	7′–2″	7′–3″	7′–4″	7′–5″
0	49.000000	50.173611	51.361111	52.562500	53.777778	55.006944
1	49.072944	50.247423	51.435791	52.638048	53.854194	55.084229
2	49.145942	50.321289	51.510525	52.713650	53.930664	55.161567
3	49.218994	50.395209	51.585314	52.789307	54.007189	55.238959
4	49.292101	50.469184	51.660156	52.865017	54.083767	55.316406
5	49.365262	50.543213	51.735053	52.940782	54.160400	55.393907
6	49.438477	50.617296	51.810004	53.016602	54.237088	55.471463
7	49.511746	50.691433	51.885010	53.092475	54.313829	55.549072
8	49.585069	50.765625	51.960069	53.168403	54.390625	55.626736
9	49.658447	50.839871	52.035183	53.244385	54.467475	55.704454
10	49.731879	50.914171	52.110352	53.320421	54.544379	55.782227
11	49.805366	50.988525	52.185574	53.396512	54.621338	55.860053
12	49.878906	51.062934	52.260851	53.472656	54.698351	55.937934
13	49.952501	51.137397	52.336182	53.548855	54.775418	56.015869
14	50.026150	51.211914	52.411567	53.625109	54.852539	56.093859
15	50.099854	51.286485	52.487006	53.701416	54.929715	56.171902

16ths	7′–6″	7′–7″	7′–8″	7′–9″	7′–10″	7′–11″
0	56.250000	57.506944	58.777778	60.062500	61.361111	62.673611
1	56.328152	57.585965	58.857666	60.143256	61.442735	62.756104
2	56.406359	57.665039	58.937609	60.224067	61.524414	62.838650
3	56.484619	57.744168	59.017605	60.304932	61.606147	62.921251
4	56.562934	57.823351	59.097656	60.385851	61.687934	63.003906
5	56.641303	57.902588	59.177762	60.466824	61.769775	63.086616
6	56.719727	57.981879	59.257921	60.547852	61.851671	63.169379
7	56.798204	58.061225	59.338135	60.628933	61.933621	63.252197
8	56.876736	58.140625	59.418403	60.710069	62.015625	63.335069
9	56.955322	58.220079	59.498725	60.791260	62.097683	63.417996
10	57.033963	58.299588	59.579102	60.872504	62.179796	63.500977
11	57.112657	58.379150	59.659532	60.953803	62.261963	63.584012
12	57.191406	58.458767	59.740017	61.035156	62.344184	63.667101
13	57.270209	58.538439	59.820557	61.116564	62.426459	63.750244
14	57.349067	58.618164	59.901150	61.198025	62.508789	63.833442
15	57.427979	58.697944	59.981798	61.279541	62.591173	63.916694

16ths	8′–0″	8′–1″	8′–2″	8′–3″	8′–4″	8′–5″
0	64.000000	65.340278	66.694444	68.062500	69.444444	70.840278
1	64.083360	65.424506	66.779541	68.148465	69.531277	70.927979
2	64.166775	65.508789	66.864692	68.234484	69.618164	71.015734
3	64.250244	65.593126	66.949897	68.320557	69.705105	71.103543
4	64.333767	65.677517	67.035156	68.406684	69.792101	71.191406
5	64.417345	65.761963	67.120470	68.492866	69.879150	71.279324
6	64.500977	65.846463	67.205838	68.579102	69.966254	71.367296
7	64.584663	65.931017	67.291260	68.665392	70.053413	71.455322
8	64.668403	66.015625	67.376736	68.751736	70.140625	71.543403
9	64.752197	66.100288	67.462267	68.838135	70.227892	71.631538
10	64.836046	66.185004	67.547852	68.924588	70.315213	71.719727
11	64.919949	66.269775	67.633491	69.011095	70.402588	71.807970
12	65.003906	66.354601	67.719184	69.097656	70.490017	71.896267
13	65.087918	66.439480	67.804932	69.184272	70.577501	71.984619
14	65.171984	66.524414	67.890734	69.270942	70.665039	72.073025
15	65.256104	66.609402	67.976590	69.357666	70.752631	72.161485

16ths	8′–6″	8′–7″	8′–8″	8′–9″	8′–10″	8′–11″
0	72.250000	73.673611	75.111111	76.562500	78.027778	79.506944
1	72.338569	73.763048	75.201416	76.653673	78.119819	79.599854
2	72.427192	73.852539	75.291775	76.744900	78.211914	79.692817
3	72.515869	73.942084	75.382189	76.836182	78.304064	79.785834
4	72.604601	74.031684	75.472656	76.927517	78.396267	79.878906
5	72.693387	74.121338	75.563178	77.018907	78.488525	79.972032
6	72.782227	74.211046	75.653754	77.110352	78.580838	80.065213
7	72.871121	74.300808	75.744385	77.201850	78.673204	80.158447
8	72.960069	74.390625	75.835069	77.293403	78.765625	80.251736
9	73.049072	74.480496	75.925808	77.385010	78.858100	80.345079
10	73.138129	74.570421	76.016602	77.476671	78.950629	80.438477
11	73.227241	74.660400	76.107449	77.568387	79.043213	80.531928
12	73.316406	74.750434	76.198351	77.660156	79.135851	80.625434
13	73.405626	74.840522	76.289307	77.751980	79.228543	80.718994
14	73.494900	74.930664	76.380317	77.843859	79.321289	80.812609
15	73.584229	75.020860	76.471381	77.935791	79.414090	80.906277

16ths	9′–0″	9′–1″	9′–2″	9′–3″	9′–4″	9′–5″
0	81.000000	82.506944	84.027778	85.562500	87.111111	88.673611
1	81.093777	82.601590	84.123291	85.658881	87.208360	88.771729
2	81.187609	82.696289	84.218859	85.755317	87.305664	88.869900
3	81.281494	82.791043	84.314480	85.851807	87.403022	88.968126
4	81.375434	82.885851	84.410156	85.948351	87.500434	89.066406
5	81.469428	82.980713	84.505887	86.044949	87.597900	89.164741
6	81.563477	83.075629	84.601671	86.141602	87.695421	89.263129
7	81.657579	83.170600	84.697510	86.238308	87.792996	89.361572
8	81.751736	83.265625	84.793403	86.335069	87.890625	89.460069
9	81.845947	83.360704	84.889350	86.431885	87.988308	89.558621
10	81.940213	83.455838	84.985352	86.528754	88.086046	89.657227
11	82.034532	83.551025	85.081407	86.625678	88.183838	89.755887
12	82.128906	83.646267	85.177517	86.722656	88.281684	89.854601
13	82.223334	83.741564	85.273682	86.819689	88.379584	89.953369
14	82.317817	83.836914	85.369900	86.916775	88.477539	90.052192
15	82.412354	83.932319	85.466173	87.013916	88.575548	90.151069

16ths	9′–6″	9′–7″	9′–8″	9′–9″	9′–10″	9′–11″
0	90.250000	91.840278	93.444444	95.062500	96.694444	98.340278
1	90.348985	91.940131	93.545166	95.164090	96.796902	98.443604
2	90.448025	92.040039	93.645942	95.265734	96.899414	98.546984
3	90.547119	92.140001	93.746772	95.367432	97.001980	98.650418
4	90.646267	92.240017	93.847656	95.469184	97.104601	98.753906
5	90.745470	92.340088	93.948595	95.570991	97.207275	98.857449
6	90.844727	92.440213	94.049588	95.672852	97.310004	98.961046
7	90.944038	92.540392	94.150635	95.774767	97.412788	99.064697
8	91.043403	92.640625	94.251736	95.876736	97.515625	99.168403
9	91.142822	92.740913	94.352892	95.978760	97.618517	99.272163
10	91.242296	92.841254	94.454102	96.080838	97.721463	99.375977
11	91.341824	92.941650	94.555366	96.182970	97.824463	99.479845
12	91.441406	93.042101	94.656684	96.285156	97.927517	99.583767
13	91.541043	93.142605	94.758057	96.387397	98.030626	99.687744
14	91.640734	93.243164	94.859484	96.489692	98.133789	99.791775
15	91.740479	93.343777	94.960965	96.592041	98.237006	99.895860

16ths	10′–0″	10′–1″	10′–2″	10′–3″	10′–4″	10′–5″
0	100.000000	101.673611	103.361111	105.062500	106.777778	108.506944
1	100.104194	101.778673	103.467041	105.169298	106.885444	108.615479
2	100.208442	101.883789	103.573025	105.276150	106.993164	108.724067
3	100.312744	101.988959	103.679064	105.383057	107.100939	108.832709
4	100.417101	102.094184	103.785156	105.490017	107.208767	108.941406
5	100.521512	102.199463	103.891303	105.597032	107.316650	109.050157
6	100.625977	102.304796	103.997504	105.704102	107.424588	109.158963
7	100.730496	102.410183	104.103760	105.811225	107.532579	109.267822
8	100.835069	102.515625	104.210069	105.918403	107.640625	109.376736
9	100.939697	102.621121	104.316433	106.025635	107.748725	109.485704
10	101.044379	102.726671	104.422852	106.132921	107.856879	109.594727
11	101.149116	102.832275	104.529324	106.240262	107.965088	109.703803
12	101.253906	102.937934	104.635851	106.347656	108.073351	109.812934
13	101.358751	103.043647	104.742432	106.455105	108.181668	109.922119
14	101.463650	103.149414	104.849067	106.562609	108.290039	110.031359
15	101.568604	103.255235	104.955756	106.670166	108.398465	110.140652

16ths	10′–6″	10′–7″	10′–8″	10′–9″	10′–10″	10′–11″
0	110.250000	112.006944	113.777778	115.562500	117.361111	119.173611
1	110.359402	112.117215	113.888916	115.674506	117.473985	119.287354
2	110.468859	112.227539	114.000109	115.786567	117.586914	119.401150
3	110.578369	112.337918	114.111355	115.898682	117.699897	119.515001
4	110.687934	112.448351	114.222656	116.010851	117.812934	119.628906
5	110.797553	112.558838	114.334012	116.123074	117.926025	119.742866
6	110.907227	112.669379	114.445421	116.235352	118.039171	119.856879
7	111.016954	112.779975	114.556885	116.347683	118.152371	119.970947
8	111.126736	112.890625	114.668403	116.460069	118.265625	120.085069
9	111.236572	113.001329	114.779975	116.572510	118.378933	120.199246
10	111.346463	113.112088	114.891602	116.685004	118.492296	120.313477
11	111.456407	113.222900	115.003282	116.797553	118.605713	120.427762
12	111.566406	113.333767	115.115017	116.910156	118.719184	120.542101
13	111.676459	113.444689	115.226807	117.022814	118.832709	120.656494
14	111.786567	113.555664	115.338650	117.135525	118.946289	120.770942
15	111.896729	113.666694	115.450548	117.248291	119.059923	120.885444

16ths	11′–0″	11′–1″	11′–2″	11′–3″	11′–4″	11′–5″
0	121.000000	122.840278	124.694444	126.562500	128.444444	130.340278
1	121.114610	122.955756	124.810791	126.679715	128.562527	130.459229
2	121.229275	123.071289	124.927192	126.796984	128.680664	130.578234
3	121.343994	123.186876	125.043647	126.914307	128.798855	130.697293
4	121.458767	123.302517	125.160156	127.031684	128.917101	130.816406
5	121.573595	123.418213	125.276720	127.149116	129.035400	130.935574
6	121.688477	123.533963	125.393338	127.266602	129.153754	131.054796
7	121.803413	123.649767	125.510010	127.384142	129.272163	131.174072
8	121.918403	123.765625	125.626736	127.501736	129.390625	131.293403
9	122.033447	123.881538	125.743517	127.619385	129.509142	131.412788
10	122.148546	123.997504	125.860352	127.737088	129.627713	131.532227
11	122.263699	124.113525	125.977241	127.854845	129.746338	131.651720
12	122.378906	124.229601	126.094184	127.972656	129.865017	131.771267
13	122.494168	124.345730	126.211182	128.090522	129.983751	131.890869
14	122.609484	124.461914	126.328234	128.208442	130.102539	132.010525
15	122.724854	124.578152	126.445340	128.326416	130.221381	132.130235

16ths	11′–6″	11′–7″	11′–8″	11′–9″	11′–10″	11′–11″
0	132.250000	134.173611	136.111111	138.062500	140.027778	142.006944
1	132.369819	134.294298	136.232666	138.184923	140.151069	142.131104
2	132.489692	134.415039	136.354275	138.307400	140.274414	142.255317
3	132.609619	134.535834	136.475939	138.429932	140.397814	142.379584
4	132.729601	134.656684	136.597656	138.552517	140.521267	142.503906
5	132.849637	134.777588	136.719428	138.675157	140.644775	142.628282
6	132.969727	134.898546	136.841254	138.797852	140.768338	142.752713
7	133.089871	135.019558	136.963135	138.920600	140.891954	142.877197
8	133.210069	135.140625	137.085069	139.043403	141.015625	143.001736
9	133.330322	135.261746	137.207058	139.166260	141.139350	143.126329
10	133.450629	135.382921	137.329102	139.289171	141.263129	143.250977
11	133.570991	135.504150	137.451199	139.412137	141.386963	143.375678
12	133.691406	135.625434	137.573351	139.535156	141.510851	143.500434
13	133.811876	135.746772	137.695557	139.658230	141.634793	143.625244
14	133.932400	135.868164	137.817817	139.781359	141.758789	143.750109
15	134.052979	135.989610	137.940131	139.904541	141.882840	143.875027

16ths	12′–0″	12′–1″	12′–2″	12′–3″	12′–4″	12′–5″
0	144.000000	146.006944	148.027778	150.062500	152.111111	154.173611
1	144.125027	146.132840	148.154541	150.190131	152.239610	154.302979
2	144.250109	146.258789	148.281359	150.317817	152.368164	154.432400
3	144.375244	146.384793	148.408230	150.445557	152.496772	154.561876
4	144.500434	146.510851	148.535156	150.573351	152.625434	154.691406
5	144.625678	146.636963	148.662137	150.701199	152.754150	154.820991
6	144.750977	146.763129	148.789171	150.829102	152.882921	154.950629
7	144.876329	146.889350	148.916260	150.957058	153.011746	155.080322
8	145.001736	147.015625	149.043403	151.085069	153.140625	155.210069
9	145.127197	147.141954	149.170600	151.213135	153.269558	155.339871
10	145.252713	147.268338	149.297852	151.341254	153.398546	155.469727
11	145.378282	147.394775	149.425157	151.469428	153.527588	155.599637
12	145.503906	147.521267	149.552517	151.597656	153.656684	155.729601
13	145.629584	147.647814	149.679932	151.725939	153.785834	155.859619
14	145.755317	147.774414	149.807400	151.854275	153.915039	155.989692
15	145.881104	147.901069	149.934923	151.982666	154.044298	156.119819

16ths	12′–6″	12′–7″	12′–8″	12′–9″	12′–10″	12′–11″
0	156.250000	158.340278	160.444444	162.562500	164.694444	166.840278
1	156.380235	158.471381	160.576416	162.695340	164.828152	166.974854
2	156.510525	158.602539	160.708442	162.828234	164.961914	167.109484
3	156.640869	158.733751	160.840522	162.961182	165.095730	167.244168
4	156.771267	158.865017	160.972656	163.094184	165.229601	167.378906
5	156.901720	158.996338	161.104845	163.227241	165.363525	167.513699
6	157.032227	159.127713	161.237088	163.360352	165.497504	167.648546
7	157.162788	159.259142	161.369385	163.493517	165.631538	167.783447
8	157.293403	159.390625	161.501736	163.626736	165.765625	167.918403
9	157.424072	159.522163	161.634142	163.760010	165.899767	168.053413
10	157.554796	159.653754	161.766602	163.893338	166.033963	168.188477
11	157.685574	159.785400	161.899116	164.026720	166.168213	168.323595
12	157.816406	159.917101	162.031684	164.160156	166.302517	168.458767
13	157.947293	160.048855	162.164307	164.293647	166.436876	168.593994
14	158.078234	160.180664	162.296984	164.427192	166.571289	168.729275
15	158.209229	160.312527	162.429715	164.560791	166.705756	168.864610

16ths	13′–0″	13′–1″	13′–2″	13′–3″	13′–4″	13′–5″
0	169.000000	171.173611	173.361111	175.562500	177.777778	180.006944
1	169.135444	171.309923	173.498291	175.700548	177.916694	180.146729
2	169.270942	171.446289	173.635525	175.838650	178.055664	180.286567
3	169.406494	171.582709	173.772814	175.976807	178.194689	180.426459
4	169.542101	171.719184	173.910156	176.115017	178.333767	180.566406
5	169 677762	171.855713	174.047553	176.253282	178.472900	180.706407
6	169.813477	171.992296	174.185004	176.391602	178.612088	180.846463
7	169.949246	172.128933	174.322510	176.529975	178.751329	180.986572
8	170.085069	172.265625	174.460069	176.668403	178.890625	181.126736
9	170.220947	172.402371	174.597683	176.806885	179.029975	181.266954
10	170.356879	172.539171	174.735352	176.945421	179.169379	181.407227
11	170.492866	172.676025	174.873074	177.084012	179.308838	181.547553
12	170.628906	172.812934	175.010851	177.222656	179.448351	181.687934
13	170.765001	172.949897	175.148682	177.361355	179.587918	181.828369
14	170.901150	173.086914	175.286567	177.500109	179.727539	181.968859
15	171.037354	173.223985	175.424506	177.638916	179.867215	182.109402

16ths	13′–6″	13′–7″	13′–8″	13′–9″	13′–10″	13′–11″
0	182.250000	184.506944	186.777778	189.062500	191.361111	193.673611
1	182.390652	184.648465	186.920166	189.205756	191.505235	193.818604
2	182.531359	184.790039	187.062609	189.349067	191.649414	193.963650
3	182.672119	184.931668	187.205105	189.492432	191.793647	194.108751
4	182.812934	185.073351	187.347656	189.635851	191.937934	194.253906
5	182.953803	185.215088	187.490262	189.779324	192.082275	194.399116
6	183.094727	185.356879	187.632921	189.922852	192.226671	194.544379
7	183.235704	185.498725	187.775635	190.066433	192.371121	194.689697
8	183.376736	185.640625	187.918403	190.210069	192.515625	194.835069
9	183.517822	185.782579	188.061225	190.353760	192.660183	194.980496
10	183.658963	185.924588	188.204102	190.497504	192.804796	195.125977
11	183.800157	186.066650	188.347032	190.641303	192.949463	195.271512
12	183.941406	186.208767	188.490017	190.785156	193.094184	195.417101
13	184.082709	186.350939	188.633057	190.929064	193.238959	195.562744
14	184.224067	186.493164	188.776150	191.073025	193.383789	195.708442
15	184.365479	186.635444	188.919298	191.217041	193.528673	195.854194

16ths	14′–0″	14′–1″	14′–2″	14′–3″	14′–4″	14′–5″
0	196.000000	198.340278	200.694444	203.062500	205.444444	207.840278
1	196.145860	198.487006	200.842041	203.210965	205.593777	207.990479
2	196.291775	198.633789	200.989692	203.359484	205.743164	208.140734
3	196.437744	198.780626	201.137397	203.508057	205.892605	208.291043
4	196.583767	198.927517	201.285156	203.656684	206.042101	208.441406
5	196.729845	199.074463	201.432970	203.805366	206.191650	208.591824
6	196.875977	199.221463	201.580838	203.954102	206.341254	208.742296
7	197.022163	199.368517	201.728760	204.102892	206.490913	208.892822
8	197.168403	199.515625	201.876736	204.251736	206.640625	209.043403
9	197.314697	199.662788	202.024767	204.400635	206.790392	209.194038
10	197.461046	199.810004	202.172852	204.549588	206.940213	209.344727
11	197.607449	199.957275	202.320991	204.698595	207.090088	209.495470
12	197.753906	200.104601	202.469184	204.847656	207.240017	209.646267
13	197.900418	200.251980	202.617432	204.996772	207.390001	209.797119
14	198.046984	200.399414	202.765734	205.145942	207.540039	209.948025
15	198.193604	200.546902	202.914090	205.295166	207.690131	210.098985

16ths	14′–6″	14′–7″	14′–8″	14′–9″	14′–10″	14′–11″
0	210.250000	212.673611	215.111111	217.562500	220.027778	222.506944
1	210.401069	212.825548	215.263916	217.716173	220.182319	222.662354
2	210.552192	212.977539	215.416775	217.869900	220.336914	222.817817
3	210.703369	213.129584	215.569689	218.023682	220.491564	222.973334
4	210.854601	213.281684	215.722656	218.177517	220.646267	223.128906
5	211.005887	213.433838	215.875678	218.331407	220.801025	223.284532
6	211.157227	213.586046	216.028754	218.485352	220.955838	223.440213
7	211.308621	213.738308	216.181885	218.639350	221.110704	223.595947
8	211.460069	213.890625	216.335069	218.793403	221.265625	223.751736
9	211.611572	214.042996	216.488308	218.947510	221.420600	223.907579
10	211.763129	214.195421	216.641602	219.101671	221.575629	224.063477
11	211.914741	214.347900	216.794949	219.255887	221.730713	224.219428
12	212.066406	214.500434	216.948351	219.410156	221.885851	224.375434
13	212.218126	214.653022	217.101807	219.564480	222.041043	224.531494
14	212.369900	214.805664	217.255317	219.718859	222.196289	224.687609
15	212.521729	214.958360	217.408881	219.873291	222.351590	224.843777

16ths	15′–0″	15′–1″	15′–2″	15′–3″	15′–4″	15′–5″
0	225.000000	227.506944	230.027778	232.562500	235.111111	237.673611
1	225.156277	227.664090	230.185791	232.721381	235.270860	237.834229
2	225.312609	227.821289	230.343859	232.880317	235.430664	237.994900
3	225.468994	227.978543	230.501980	233.039307	235.590522	238.155626
4	225.625434	228.135851	230.660156	233.198351	235.750434	238.316406
5	225.781928	228.293213	230.818387	233.357449	235.910400	238.477241
6	225.938477	228.450629	230.976671	233.516602	236.070421	238.638129
7	226.095079	228.608100	231.135010	233.675808	236.230496	238.799072
8	226.251736	228.765625	231.293403	233.835069	236.390625	238.960069
9	226.408447	228.923204	231 451850	233.994385	236.550808	239.121121
10	226.565213	229.080838	231.610352	234.153754	236.711046	239.282227
11	226.722032	229.238525	231.768907	234.313178	236.871338	239.443387
12	226.878906	229.396267	231.927517	234 472656	237.031684	239.604601
13	227.035834	229.554064	232.086182	234.632189	237.192084	239.765869
14	227.192817	229.711914	232.244900	234.791775	237.352539	239.927192
15	227.349854	229.869819	232.403673	234.951416	237.513048	240.088569

16ths	15′–6″	15′–7″	15′–8″	15′–9″	15′–10″	15′–11″
0	240.250000	242.840278	245.444444	248.062500	250.694444	253.340278
1	240.411485	243.002631	245.607666	248.226590	250.859402	253.506104
2	240.573025	243.165039	245.770942	248.390734	251.024414	253.671984
3	240.734619	243.327501	245.934272	248.554932	251.189480	253.837918
4	240.896267	243.490017	246.097656	248.719184	251.354601	254.003906
5	241.057970	243.652588	246.261095	248.883491	251.519775	254.169949
6	241.219727	243.815213	246.424588	249.047852	251.685004	254.336046
7	241.381538	243.977892	246.588135	249.212267	251.850288	254.502197
8	241.543403	244.140625	246.751736	249.376736	252.015625	254.668403
9	241.705322	244.303413	246.915392	249.541260	252.181017	254.834663
10	241.867296	244.466254	247.079102	249.705838	252.346463	255.000977
11	242.029324	244.629150	247.242866	249.870470	252.511963	255.167345
12	242.191406	244.792101	247 406684	250.035156	252.677517	255.333767
13	242.353543	244.955105	247.570557	250.199897	252.843126	255.500244
14	242.515734	245.118164	247.734484	250.364692	253.008789	255.666775
15	242.677979	245.281277	247.898465	250.529541	253.174506	255.833360

16ths	16′–0″	16′–1″	16′–2″	16′–3″	16′–4″	16′–5″
0	256.000000	258.673611	261.361111	264.062500	266.777778	269.506944
1	256.166694	258.841173	261.529541	264.231798	266.947944	269.677979
2	256.333442	259.008789	261.698025	264.401150	267.118164	269.849067
3	256.500244	259.176459	261.866564	264.570557	267.288439	270.020209
4	256.667101	259.344184	262.035156	264.740017	267.458767	270.191406
5	256.834012	259.511963	262.203803	264.909532	267.629150	270.362657
6	257.000977	259.679796	262.372504	265.079102	267.799588	270.533963
7	257.167996	259.847683	262.541260	265.248725	267.970079	270.705322
8	257.335069	260.015625	262.710069	265.418403	268.140625	270.876736
9	257.502197	260.183621	262.878933	265.588135	268.311225	271.048204
10	257.669379	260.351671	263.047852	265.757921	268.481879	271.219727
11	257.836616	260.519775	263.216824	265.927762	268.652588	271.391303
12	258.003906	260.687934	263.385851	266.097656	268.823351	271.562934
13	258.171251	260.856147	263.554932	266.267605	268.994168	271.734619
14	258.338650	261.024414	263.724067	266.437609	269.165039	271.906359
15	258.506104	261.192735	263.893256	266.607666	269.335965	272.078152

16ths	16′–6″	16′–7″	16′–8″	16′–9″	16′–10″	16′–11″
0	272.250000	275.006944	277.777778	280.562500	283.361111	286.173611
1	272.421902	275.179715	277.951416	280.737006	283.536485	286.349854
2	272.593859	275.352539	278.125109	280.911567	283.711914	286.526150
3	272.765869	275.525418	278.298855	281.086182	283.887397	286.702501
4	272.937934	275.698351	278.472656	281.260851	284.062934	286.878906
5	273.110053	275.871338	278.646512	281.435574	284.238525	287.055366
6	273.282227	276.044379	278.820421	281.610352	284.414171	287.231879
7	273.454454	276.217475	278.994385	281.785183	284.589871	287.408447
8	273.626736	276.390625	279.168403	281.960069	284.765625	287.585069
9	273.799072	276.563829	279.342475	282.135010	284.941433	287.761746
10	273.971463	276.737088	279.516602	282.310004	285.117296	287.938477
11	274.143907	276.910400	279.690782	282.485053	285.293213	288.115262
12	274.316406	277.083767	279.865017	282.660156	285.469184	288.292101
13	274.488959	277.257189	280.039307	282.835314	285.645209	288.468994
14	274.661567	277.430664	280.213650	283.010525	285.821289	288.645942
15	274.834229	277.604194	280.388048	283.185791	285.997423	288.822944

16ths	17′–0″	17′–1″	17′–2″	17′–3″	17′–4″	17′–5″
0	289.000000	291.840278	294.694444	297.562500	300.444444	303.340278
1	289.177110	292.018256	294.873291	297.742215	300.625027	303.521729
2	289.354275	292.196289	295.052192	297.921984	300.805664	303.703234
3	289.531494	292.374376	295.231147	298.101807	300.986355	303.884793
4	289.708767	292.552517	295.410156	298.281684	301.167101	304.066406
5	289.886095	292.730713	295.589220	298.461616	301.347900	304.248074
6	290.063477	292.908963	295.768338	298.641602	301.528754	304.429796
7	290.240913	293.087267	295.947510	298.821642	301.709663	304.611572
8	290.418403	293.265625	296.126736	299.001736	301.890625	304.793403
9	290.595947	293.444038	296.306017	299.181885	302.071642	304.975288
10	290.773546	293.622504	296.485352	299.362088	302.252713	305.157227
11	290.951199	293.801025	296.664741	299.542345	302.433838	305.339220
12	291.128906	293.979601	296.844184	299.722656	302.615017	305.521267
13	291.306668	294.158230	297.023682	299.903022	302.796251	305.703369
14	291.484484	294.336914	297.203234	300.083442	302.977539	305.885525
15	291.662354	294.515652	297.382840	300.263916	303.158881	306.067735

16ths	17′–6″	17′–7″	17′–8″	17′–9″	17′–10″	17′–11″
0	306.250000	309.173611	312.111111	315.062500	318.027778	321.006944
1	306.432319	309.356798	312.295166	315.247423	318.213569	321.193604
2	306.614692	309.540039	312.479275	315.432400	318.399414	321.380317
3	306.797119	309.723334	312.663439	315.617432	318.585314	321.567084
4	306.979601	309.906684	312.847656	315.802517	318.771267	321.753906
5	307.162137	310.090088	313.031928	315.987657	318.957275	321.940782
6	307.344727	310.273546	313.216254	316.172852	319.143338	322.127713
7	307.527371	310.457058	313.400635	316.358100	319.329454	322.314697
8	307.710069	310.640625	313.585069	316 543403	319.515625	322.501736
9	307.892822	310.824246	313.769558	316.728760	319.701850	322.688829
10	308.075629	311.007921	313.954102	316.914171	319.888129	322.875977
11	308.258491	311.191650	314.138699	317.099637	320.074463	323.063178
12	308.441406	311.375434	314.323351	317.285156	320.260851	323.250434
13	308.624376	311.559272	314.508057	317.470730	320.447293	323.437744
14	308.807400	311.743164	314.692817	317.656359	320.633789	323.625109
15	308.990479	311.927110	314.877631	317.842041	320.820340	323.812527

16ths	18′–0″	18′–1″	18′–2″	18′–3″	18′–4″	18′–5″
0	324.000000	327.006944	330.027778	333.062500	336.111111	339.173611
1	324.187527	327.195340	330.217041	333.252631	336.302110	339.365479
2	324.375109	327.383789	330.406359	333.442817	336.493164	339.557400
3	324.562744	327.572293	330.595730	333.633057	336.684272	339.749376
4	324.750434	327.760851	330.785156	333.823351	336.875434	339.941406
5	324.938178	327.949463	330.974637	334.013699	337.066650	340.133491
6	325.125977	328.138129	331.164171	334.204102	337.257921	340.325629
7	325.313829	328.326850	331.353760	334.394558	337.449246	340.517822
8	325.501736	328.515625	331.543403	334.585069	337.640625	340.710069
9	325.689697	328.704454	331.733100	334.775635	337.832058	340.902371
10	325.877713	328.893338	331.922852	334.966254	338.023546	341.094727
11	326.065782	329.082275	332.112657	335.156928	338.215088	341.287137
12	326.253906	329.271267	332.302517	335.347656	338.406684	341.479601
13	326.442084	329.460314	332.492432	335.538439	338.598334	341.672119
14	326.630317	329.649414	332.682400	335.729275	338.790039	341.864692
15	326.818604	329.838569	332.872423	335 920166	338.981798	342.057319

16ths	18′–6″	18′–7″	18′–8″	18′–9″	18′–10″	18′–11″
0	342.250000	345.340278	348.444444	351.562500	354.694444	357.840278
1	342.442735	345.533881	348.638916	351.757840	354.890652	358.037354
2	342.635525	345.727539	348.833442	351.953234	355.086914	358.234484
3	342.828369	345.921251	349.028022	352.148682	355.283230	358.431668
4	343.021267	346.115017	349.222656	352.344184	355.479601	358.628906
5	343.214220	346.308838	349.417345	352.539741	355.676025	358.826199
6	343.407227	346.502713	349.612088	352.735352	355.872504	359.023546
7	343.600288	346.696642	349.806885	352.931017	356.069038	359.220947
8	343.793403	346.890625	350.001736	353.126736	356.265625	359.418403
9	343.986572	347.084663	350.196642	353.322510	356.462267	359.615913
10	344.179796	347.278754	350.391602	353.518338	356.658963	359.813477
11	344.373074	347.472900	350.586616	353.714220	356.855713	360.011095
12	344.566406	347 667101	350.781684	353.910156	357 052517	360.208767
13	344.759793	347.861355	350.976807	354.106147	357.249376	360.406494
14	344.953234	348.055664	351.171984	354.302192	357.446289	360.604275
15	345.146729	348.250027	351.367215	354.498291	357.643256	360.802110

16ths	19′–0″	19′–1″	19′–2″	19′–3″	19′–4″	19′–5″
0	361.000000	364.173611	367.361111	370.562500	373.777778	377.006944
1	361.197944	364.372423	367.560791	370.763048	373.979194	377.209229
2	361.395942	364.571289	367.760525	370.963650	374.180664	377.411567
3	361.593994	364.770209	367.960314	371.164307	374.382189	377.613959
4	361.792101	364.969184	368.160156	371.365017	374.583767	377.816406
5	361.990262	365.168213	368.360053	371.565782	374.785400	378.018907
6	362.188477	365.367296	368.560004	371.766602	374.987088	378.221463
7	362.386746	365.566433	368.760010	371.967475	375.188829	378.424072
8	362.585069	365.765625	368.960069	372.168403	375.390625	378.626736
9	362.783447	365.964871	369.160183	372.369385	375.592475	378.829454
10	362.981879	366.164171	369.360352	372.570421	375.794379	379.032227
11	363.180366	366.363525	369.560574	372.771512	375.996338	379.235053
12	363.378906	366.562934	369.760851	372.972656	376.198351	379.437934
13	363.577501	366.762397	369.961182	373.173855	376.400418	379.640869
14	363.776150	366.961914	370.161567	373.375109	376.602539	379.843859
15	363.974854	367.161485	370.362006	373.576416	376.804715	380.046902

16ths	19′–6″	19′–7″	19′–8″	19′–9″	19′–10″	19′–11″
0	380.250000	383.506944	386.777778	390.062500	393.361111	396.673611
1	380.453152	383.710965	386.982666	390.268256	393.567735	396.881104
2	380.656359	383.915039	387.187609	390.474067	393.774414	397.088650
3	380.859619	384.119168	387.392605	390.679932	393.981147	397 296251
4	381.062934	384.323351	387.597656	390.885851	394.187934	397.503906
5	381.266303	384.527588	387.802762	391.091824	394.394775	397.711616
6	381.469727	384.731879	388.007921	391.297852	394.601671	397.919379
7	381.673204	384.936225	388.213135	391.503933	394.808621	398.127197
8	381.876736	385.140625	388.418403	391.710069	395.015625	398.335069
9	382.080322	385.345079	388.623725	391.916260	395.222683	398.542996
10	382.283963	385.549588	388.829102	392.122504	395.429796	398.750977
11	382.487657	385.754150	389.034532	392.328803	395.636963	398.959012
12	382.691406	385.958767	389.240017	392.535156	395.844184	399.167101
13	382.895209	386.163439	389.445557	392.741564	396.051459	399.375244
14	383.099067	386.368164	389.651150	392.948025	396.258789	399.583442
15	383.302979	386.572944	389.856798	393.154541	396.466173	399.791694

16ths	20′–0″	20′–1″	20′–2″	20′–3″	20′–4″	20′–5″
0	400.000000	403.340278	406.694444	410.062500	413.444444	416.840278
1	400.208360	403.549506	406.904541	410.273465	413.656277	417.052979
2	400.416775	403.758789	407.114692	410.484484	413.868164	417.265734
3	400.625244	403.968126	407.324897	410.695557	414.080105	417.478543
4	400.833767	404.177517	407.535156	410.906684	414.292101	417.691406
5	401.042345	404.386963	407.745470	411.117866	414.504150	417.904324
6	401.250977	404.596463	407.955838	411.329102	414.716254	418.117296
7	401.459663	404.806017	408.166260	411.540392	414.928413	418.330322
8	401.668403	405.015625	408.376736	411.751736	415.140625	418.543403
9	401.877197	405.225288	408.587267	411.963135	415.352892	418.756538
10	402.086046	405.435004	408.797852	412.174588	415.565213	418.969727
11	402.294949	405.644775	409.008491	412.386095	415.777588	419.182970
12	402.503906	405.854601	409.219184	412.597656	415.990017	419.396267
13	402.712918	406.064480	409.429932	412.809272	416.202501	419.609619
14	402.921984	406.274414	409.640734	413.020942	416.415039	419.823025
15	403.131104	406.484402	409.851590	413.232666	416.627631	420.036485

16ths	20′–6″	20′–7″	20′–8″	20′–9″	20′–10″	20′–11″
0	420.250000	423.673611	427.111111	430.562500	434.027778	437.506944
1	420.463569	423.888048	427.326416	430.778673	434.244819	437.724854
2	420.677192	424.102539	427.541775	430.994900	434.461914	437.942817
3	420.890869	424.317084	427.757189	431.211182	434.679064	438.160834
4	421.104601	424.531684	427.972656	431.427517	434.896267	438.378906
5	421.318387	424.746338	428.188178	431.643907	435.113525	438.597032
6	421.532227	424.961046	428.403754	431.860352	435.330838	438.815213
7	421.746121	425.175808	428.619385	432.076850	435.548204	439.033447
8	421.960069	425.390625	428.835069	432.293403	435.765625	439.251736
9	422.174072	425.605496	429.050808	432.510010	435.983100	439.470079
10	422.388129	425.820421	429.266602	432.726671	436.200629	439.688477
11	422.602241	426.035400	429.482449	432.943387	436.418213	439.906928
12	422.816406	426.250434	429.698351	433.160156	436.635851	440.125434
13	423.030626	426.465522	429.914307	433.376980	436.853543	440.343994
14	423.244900	426.680664	430.130317	433.593859	437.071289	440.562609
15	423.459229	426.895860	430.346381	433.810791	437.289090	440.781277

16ths	21′–0″	21′–1″	21′–2″	21′–3″	21′–4″	21′–5″
0	441.000000	444.506944	448.027778	451.562500	455.111111	458.673611
1	441.218777	444.726590	448.248291	451.783881	455.333360	458.896729
2	441.437609	444.946289	448.468859	452.005317	455.555664	459.119900
3	441.656494	445.166043	448.689480	452.226807	455.778022	459.343126
4	441.875434	445.385851	448.910156	452.448351	456.000434	459.566406
5	442.094428	445.605713	449.130887	452.669949	456.222900	459.789741
6	442.313477	445.825629	449.351671	452.891602	456.445421	460.013129
7	442.532579	446.045600	449.572510	453.113308	456.667996	460.236572
8	442.751736	446.265625	449.793403	453.335069	456.890625	460.460069
9	442.970947	446.485704	450.014350	453.556885	457.113308	460.683621
10	443.190213	446.705838	450.235352	453.778754	457.336046	460.907227
11	443.409532	446.926025	450.456407	454.000678	457.558838	461.130887
12	443.628906	447.146267	450.677517	454.222656	457.781684	461.354601
13	443.848334	447.366564	450.898682	454.444689	458.004584	461.578369
14	444.067817	447.586914	451.119900	454.666775	458.227539	461.802192
15	444.287354	447.807319	451.341173	454.888916	458.450548	462.026069

16ths	21′–6″	21′–7″	21′–8″	21′–9″	21′–10″	21′–11″
0	462.250000	465.840278	469.444444	473.062500	476.694444	480.340278
1	462.473985	466.065131	469.670166	473.289090	476.921902	480.568604
2	462.698025	466.290039	469.895942	473.515734	477.149414	480.796984
3	462.922119	466.515001	470.121772	473.742432	477.376980	481.025418
4	463.146267	466.740017	470.347656	473.969184	477.604601	481.253906
5	463.370470	466.965088	470.573595	474.195991	477.832275	481.482449
6	463.594727	467.190213	470.799588	474.422852	478.060004	481.711046
7	463.819038	467.415392	471.025635	474.649767	478.287788	481.939697
8	464.043403	467.640625	471.251736	474.876736	478.515625	482.168403
9	464.267822	467.865913	471.477892	475.103760	478.743517	482.397163
10	464.492296	468.091254	471.704102	475.330838	478.971463	482.625977
11	464.716824	468.316650	471.930366	475.557970	479.199463	482.854845
12	464.941406	468.542101	472.156684	475.785156	479.427517	483.083767
13	465.166043	468.767605	472.383057	476.012397	479.655626	483.312744
14	465.390734	468.993164	472.609484	476.239692	479.883789	483.541775
15	465.615479	469.218777	472.835965	476.467041	480.112006	483.770860

16ths	22′–0″	22′–1″	22′–2″	22′–3″	22′–4″	22′–5″
0	484.000000	487.673611	491.361111	495.062500	498.777778	502.506944
1	484.229194	487.903673	491.592041	495.294298	499.010444	502.740479
2	484.458442	488.133789	491.823025	495.526150	499.243164	502.974067
3	484.687744	488.363959	492.054064	495.758057	499.475939	503.207709
4	484.917101	488.594184	492.285156	495.990017	499.708767	503.441406
5	485.146512	488.824463	492.516303	496.222032	499.941650	503.675157
6	485.375977	489.054796	492.747504	496.454102	500.174588	503.908963
7	485.605496	489.285183	492.978760	496.686225	500.407579	504.142822
8	485.835069	489.515625	493.210069	496.918403	500.640625	504.376736
9	486.064697	489.746121	493.441433	497.150635	500.873725	504.610704
10	486.294379	489.976671	493.672852	497.382921	501.106879	504.844727
11	486.524116	490.207275	493.904324	497.615262	501.340088	505.078803
12	486.753906	490.437934	494.135851	497.847656	501.573351	505.312934
13	486.983751	490.668647	494.367432	498.080105	501.806668	505.547119
14	487.213650	490.899414	494.599067	498.312609	502.040039	505.781359
15	487.443604	491.130235	494.830756	498.545166	502.273465	506.015652

16ths	22′–6″	22′–7″	22′–8″	22′–9″	22′–10″	22′–11″
0	506.250000	510.006944	513.777778	517.562500	521.361111	525.173611
1	506.484402	510.242215	514.013916	517.799506	521.598985	525.412354
2	506.718859	510.477539	514.250109	518.036567	521.836914	525.651150
3	506.953369	510.712918	514.486355	518.273682	522.074897	525.890001
4	507.187934	510.948351	514.722656	518.510851	522.312934	526.128906
5	507.422553	511.183838	514.959012	518.748074	522.551025	526.367866
6	507.657227	511.419379	515.195421	518.985352	522.789171	526.606879
7	507.891954	511.654975	515.431885	519.222683	523.027371	526.845947
8	508.126736	511.890625	515.668403	519.460069	523.265625	527.085069
9	508.361572	512.126329	515.904975	519.697510	523.503933	527.324246
10	508.596463	512.362088	516.141602	519.935004	523.742296	527.563477
11	508.831407	512.597900	516.378282	520.172553	523.980713	527.802762
12	509.066406	512.833767	516.615017	520.410156	524.219184	528.042101
13	509.301459	513.069689	516.851807	520.647814	524.457709	528.281494
14	509.536567	513.305664	517.088650	520.885525	524.696289	528.520942
15	509.771729	513.541694	517.325548	521.123291	524.934923	528.760444

16ths	23′–0″	23′–1″	23′–2″	23′–3″	23′–4″	23′–5″
0	529.000000	532.840278	536.694444	540.562500	544.444444	548.340278
1	529.239610	533.080756	536.935791	540.804715	544.687527	548.584229
2	529.479275	533.321289	537.177192	541.046984	544.930664	548.828234
3	529.718994	533.561876	537.418647	541.289307	545.173855	549.072293
4	529.958767	533.802517	537.660156	541.531684	545.417101	549.316406
5	530.198595	534.043213	537.901720	541.774116	545.660400	549.560574
6	530.438477	534.283963	538.143338	542.016602	545.903754	549.804796
7	530.678413	534.524767	538.385010	542.259142	546.147163	550.149072
8	530.918403	534.765625	538.626736	542.501736	546.390625	550.293403
9	531.158447	535.006538	538.868517	542.744385	546.634142	550.537788
10	531.398546	535.247504	539.110352	542.987088	546.877713	550.782227
11	531.638699	535.488525	539.352241	543.229845	547.121338	551.026720
12	531.878906	535.729601	539.594184	543.472656	547.365017	551.271267
13	532.119168	535.970730	539.836182	543.715522	547.608751	551.515869
14	532.359484	536.211914	540.078234	543.958442	547.852539	551.760525
15	532.599854	536.453152	540.320340	544.201416	548.096381	552.005235

16ths	23′–6″	23′–7″	23′–8″	23′–9″	23′–10″	23′–11″
0	552.250000	556.173611	560.111111	564.062500	568.027778	572.006944
1	552.494819	556.419298	560.357666	564.309923	568.276069	572.256104
2	552.739692	556.665039	560.604275	564.557400	568.524414	572.505317
3	552.984619	556.910834	560.850939	564.804932	568.772814	572.754584
4	553.229601	557.156684	561.097656	565.052517	569.021267	573.003906
5	553.474637	557.402588	561.344428	565.300157	569.269775	573.253282
6	553.719727	557.648546	561.591254	565.547852	569.518338	573.502713
7	553.964871	557.894558	561.838135	565.795600	569.766954	573.752197
8	554.210069	558.140625	562.085069	566.043403	570.015625	574.001736
9	554.455322	558.386746	562.332058	566.291260	570.264350	574.251329
10	554.700629	558.632921	562.579102	566.539171	570.513129	574.500977
11	554.945991	558.879150	562.826199	566.787137	570.761963	574.750678
12	555.191406	559.125434	563.073351	567.035156	571.010851	575.000434
13	555.436876	559.371772	563.320557	567.283230	571.259793	575.250244
14	555.682400	559.618164	563.567817	567.531359	571.508789	575.500109
15	555.927979	559.864610	563.815131	567.779541	571.757840	575.750027

16ths	24′–0″	24′–1″	24′–2″	24′–3″	24′–4″	24′–5″
0	576.000000	580.006944	584.027778	588.062500	592.111111	596.173611
1	576.250027	580.257840	584.279541	588.315131	592.364610	596.427979
2	576.500109	580.508789	584.531359	588.567817	592.618164	596.682400
3	576.750244	580.759793	584.783230	588.820557	592.871772	596.936876
4	577.000434	581.010851	585.035156	589.073351	593.125434	597.191406
5	577.250678	581.261963	585.287137	589.326199	593.379150	597.445991
6	577.500977	581.513129	585.539171	589.579102	593.632921	597.700629
7	577.751329	581.764350	585.791260	589.832058	593.886746	597.955322
8	578.001736	582.015625	586.043403	590.085069	594.140625	598.210069
9	578.252197	582.266954	586.295600	590.338135	594.394558	598.464871
10	578.502713	582.518338	586.547852	590.591254	594.648546	598.719727
11	578.753282	582.769775	586.800157	590.844428	594.902588	598.974637
12	579.003906	583.021267	587.052517	591.097656	595.156684	599.229601
13	579.254584	583.272814	587.304932	591.350939	595.410834	599.484619
14	579.505317	583.524414	587.557400	591.604275	595.665039	599.739692
15	579.756104	583.776069	587.809923	591.857666	595.919298	599.994819

16ths	24′–6″	24′–7″	24′–8″	24′–9″	24′–10″	24′–11″
0	600.250000	604.340278	608.444444	612.562500	616.694444	620.840278
1	600.505235	604.596381	608.701416	612.820340	616.953152	621.099854
2	600.760525	604.852539	608.958442	613.078234	617.211914	621.359484
3	601.015869	605.108751	609.215522	613.336182	617.470730	621.619168
4	601.271267	605.365017	609.472656	613.594184	617.729601	621.878906
5	601.526720	605.621338	609.729845	613.852241	617.988525	622.138699
6	601.782227	605.877713	609.987088	614.110352	618.247504	622.398546
7	602.037788	606.134142	610.244385	614.368517	618.506538	622.658447
8	602.293403	606.390625	610.501736	614.626736	618.765625	622.918403
9	602.549072	606.647163	610.759142	614.885010	619.024767	623.178413
10	602.804796	606.903754	611.016602	615.143338	619.283963	623.438477
11	603.060574	607.160400	611.274116	615.401720	619.543213	623.698595
12	603.316406	607.417101	611.531684	615.660156	619.802517	623.958767
13	603.572293	607.673855	611.789307	615.918647	620.061876	624.218994
14	603.828234	607.930664	612.046984	616.177192	620.321289	624.479275
15	604.084229	608.187527	612.304715	616.435791	620.580756	624.739610

16ths	25′–0″	25′–1″	25′–2″	25′–3″	25′–4″.	25′–5″
0	625.000000	629.173611	633.361111	637.562500	641.777778	646.006944
1	625.260444	629.434923	633.623291	637.825548	642.041694	646.271729
2	625.520942	629.696289	633.885525	638.088650	642.305664	646.536567
3	625.781494	629.957709	634.147814	638.351807	642.569689	646.801459
4	626.042101	630.219184	634.410156	638.615017	642.833767	647.066406
5	626.302762	630.480713	634.672553	638.878282	643.097900	647.331407
6	626.563477	630.742296	634.935004	639.141602	643.362088	647.596463
7	626.824246	631.003933	635.197510	639.404975	643.626329	647.861572
8	627.085069	631.265625	635.460069	639.668403	643.890625	648.126736
9	627.345947	631.527371	635.722683	639.931885	644.154975	648.391954
10	627.606879	631.789171	635.985352	640.195421	644.419379	648.657227
11	627.867866	632.051025	636.248074	640.459012	644.683838	648.922553
12	628.128906	632.312934	636.510851	640.722656	644.948351	649.187934
13	628.390001	632.574897	636.773682	640.986355	645.212918	649.453369
14	628.651150	632.836914	637.036567	641.250109	645.477539	649.718859
15	628.912354	633.098985	637.299506	641.513916	645.742215	649.984402

16ths	25′–6″	25′–7″	25′–8″	25′–9″	25′–10″	25′–11″
0	650.250000	654.506944	658.777778	663.062500	667.361111	671.673611
1	650.515652	654.773465	659.045166	663.330756	667.630235	671.943604
2	650.781359	655.040039	659.312609	663.599067	667.899414	672.213650
3	651.047119	655.306668	659.580105	663.867432	668.168647	672.483751
4	651.312934	655.573351	659.847656	664.135851	668.437934	672.753906
5	651.578803	655.840088	660.115262	664.404324	668.707275	673.024116
6	651.844727	656.106879	660.382921	664.672852	668.976671	673.294379
7	652.110704	656.373725	660.650635	664.941433	669.246121	673.564697
8	652.376736	656.640625	660.918403	665.210069	669.515625	673.835069
9	652.642822	656.907579	661.186225	665.478760	669.785183	674.105496
10	652.908963	657.174588	661.454102	665.747504	670.054796	674.375977
11	653.175157	657.441650	661.722032	666.016303	670.324463	674.646512
12	653.441406	657.708767	661.990017	666.285156	670.594184	674.917101
13	653.707709	657.975939	662.258057	666.554064	670.863959	675.187744
14	653.974067	658.243164	662.526150	666.823025	671.133789	675.458442
15	654.240479	658.510444	662.794298	667.092041	671.403673	675.729194

16ths	26′–0″	26′–1″	26′–2″	26′–3″	26′–4″	26′–5″
0	676.000000	680.340278	684.694444	689.062500	693.444444	697.840278
1	676.270860	680.612006	684.967041	689.335965	693.718777	698.115479
2	676.541775	680.883789	685.239692	689.609484	693.993164	698.390734
3	676.812744	681.155626	685.512397	689.883057	694.267605	698.666043
4	677.083767	681.427517	685.785156	690.156684	694.542101	698.941406
5	677.354845	681.699463	686.057970	690.430366	694.816650	699.216824
6	677.625977	681.971463	686.330838	690.704102	695.091254	699.492296
7	677.897163	682.243517	686.603760	690.977892	695.365913	699.767822
8	678.168403	682.515625	686.876736	691.251736	695.640625	700.043403
9	678.439697	682.787788	687.149767	691.525635	695.915392	700.319038
10	678.711046	683.060004	687.422852	691.799588	696.190213	700.594727
11	678.982449	683.332275	687.695991	692.073595	696.465088	700.870470
12	679.253906	683.604601	687.969184	692.347656	696.740017	701.146267
13	679.525418	683.876980	688.242432	692.621772	697.015001	701.422119
14	679.796984	684.149414	688.515734	692.895942	697.290039	701.698025
15	680.068604	684.421902	688.789090	693.170166	697.565131	701.973985

16ths	26′–6″	26′–7″	26′–8″	26′–9″	26′–10″	26′–11
0	702.250000	706.673611	711.111111	715.562500	720.027778	724.506944
1	702.526069	706.950548	711.388916	715.841173	720.307319	724.787354
2	702.802192	707.227539	711.666775	716.119900	720.586914	725.067817
3	703.078369	707.504584	711.944689	716.398682	720.866564	725.348334
4	703.354601	707.781684	712.222656	716.677517	721.146267	725.628906
5	703.630887	708.058838	712.500678	716.956407	721.426025	725.909532
6	703.907227	708.336046	712.778754	717.235352	721.705838	726.190213
7	704.183621	708.613308	713.056885	717.514350	721.985704	726.470947
8	704.460069	708.890625	713.335069	717.793403	722.265625	726.751736
9	704.736572	709.167996	713.613308	718.072510	722.545600	727.032579
10	705.013129	709.445421	713.891602	718.351671	722.825629	727.313477
11	705.289741	709.722900	714.169949	718.630887	723.105713	727.594428
12	705.566406	710.000434	714.448351	718.910156	723.385851	727.875434
13	705.843126	710.278022	714.726807	719.189480	723.666043	728.156494
14	706.119900	710.555664	715.005317	719.468859	723.946289	728.437609
15	706.396729	710.833360	715.283881	719.748291	724.226590	728.718777

16ths	27′–0″	27′–1″	27′–2″	27′–3″	27′–4″	27′–5″
0	729.000000	733.506944	738.027778	742.562500	747.111111	751.673611
1	729.281277	733.789090	738.310791	742.846381	747.395860	751.959229
2	729.562609	734.071289	738.593859	743.130317	747.680664	752.244900
3	729.843994	734.353543	738.876980	743.414307	747.965522	752.530626
4	730.125434	734.635851	739.160156	743.698351	748.250434	752.816406
5	730.406928	734.918213	739.443387	743.982449	748.535400	753.102241
6	730.688477	735.200629	739.726671	744.266602	748.820421	753.388129
7	730.970079	735.483100	740.010010	744.550808	749.105496	753.674072
8	731.251736	735.765625	740.293403	744.835069	749.390625	753.960069
9	731.533447	736.048204	740.576850	745.119385	749.675808	754.246121
10	731.815213	736.330838	740.860352	745.403754	749.961046	754.532227
11	732.097032	736.613525	741.143907	745.688178	750.246338	754.818387
12	732.378906	736.896267	741.427517	745.972656	750.531684	755.104601
13	732.660834	737.179064	741.711182	746.257189	750.817084	755.390869
14	732.942817	737.461914	741.994900	746.541775	751.102539	755.677192
15	733.224854	737.744819	742.278673	746.826416	751.388048	755.963569

16ths	27′–6″	27′–7″	27′–8″	27′–9″	27′–10″	27′–11″
0	756.250000	760.840278	765.444444	770.062500	774.694444	779.340278
1	756.536485	761.127631	765.732666	770.351590	774.984402	779.631104
2	756.823025	761.415039	766.020942	770.640734	775.274414	779.921984
3	757.109619	761.702501	766.309272	770.929932	775.564480	780.212918
4	757.396267	761.990017	766.597656	771.219184	775.854601	780.503906
5	757.682970	762.277588	766.886095	771.508491	776.144775	780.794949
6	757.969727	762.565213	767.174588	771.797852	776.435004	781.086046
7	758.256538	762.852892	767.463135	772.087267	776.725288	781.377197
8	758.543403	763.140625	767.751736	772.376736	777.015625	781.668403
9	758.830322	763.428413	768.040392	772.666260	777.306017	781.959663
10	759.117296	763.716254	768.329102	772.955838	777.596463	782.250977
11	759.404324	764.004150	768.617866	773.245470	777.886963	782.542345
12	759.691406	764.292101	768.906684	773.535156	778.177517	782.833767
13	759.978543	764.580105	769.195557	773.824897	778.468126	783.125244
14	760.265734	764.868164	769.484484	774.114692	778.758789	783.416775
15	760.552979	765.156277	769.773465	774.404541	779.049506	783.708360

16ths	28′–0″	28′–1″	28′–2″	28′–3″	28′–4″	28′–5″
0	784.000000	788.673611	793.361111	798.062500	802.777778	807.506944
1	784.291694	788.966173	793.654541	798.356798	803.072944	807.802979
2	784.583442	789.258789	793.948025	798.651150	803.368164	808.099067
3	784.875244	789.551459	794.241564	798.945557	803.663439	808.395209
4	785.167101	789.844184	794.535156	799.240017	803.958767	808.691406
5	785.459012	790.136963	794.828803	799.534532	804.254150	808.987657
6	785.750977	790.429796	795.122504	799.829102	804.549588	809.283963
7	786.042996	790.722683	795.416260	800.123725	804.845079	809.580322
8	786.335069	791.015625	795.710069	800.418403	805.140625	809.876736
9	786.627197	791.308621	796.003933	800.713135	805.436225	810.173204
10	786.919379	791.601671	796.297852	801.007921	805.731879	810.469727
11	787.211616	791.894775	796.591824	801.302762	806.027588	810.766303
12	787.503906	792.187934	796.885851	801.597656	806.323351	811.062934
13	787.796251	792.481147	797.179932	801.892605	806.619168	811.359619
14	788.088650	792.774414	797.474067	802.187609	806.915039	811.656359
15	788.381104	793.067735	797.768256	802.482666	807.210965	811.953152

16ths	28′–6″	28′–7″	28′–8″	28′–9″	28′–10″	28′–11″
0	812.250000	817.006944	821.777778	826.562500	831.361111	836.173611
1	812.546902	817.304715	822.076416	826.862006	831.661485	836.474854
2	812.843859	817.602539	822.375109	827.161567	831.961914	836.776150
3	813.140869	817.900418	822.673855	827.461182	832.262397	837.077501
4	813.437934	818.198351	822.972656	827.760851	832.562934	837.378906
5	813.735053	818.496338	823.271512	828.060574	832.863525	837.680366
6	814.032227	818.794379	823.570421	828.360352	833.164171	837.981879
7	814.329454	819.092475	823.869385	828.660183	833.464871	838.283447
8	814.626736	819.390625	824.168403	828.960069	833.765625	838.585069
9	814.924072	819.688829	824.467475	829.260010	834.066433	838.886746
10	815.221463	819.987088	824.766602	829.560004	834.367296	839.188477
11	815.518907	820.285400	825.065782	829.860053	834.668213	839.490262
12	815.816406	820.583767	825.365017	830.160156	834.969184	839.792101
13	816.113959	820.882189	825.664307	830.460314	835.270209	840.093994
14	816.411567	821.180664	825.963650	830.760525	835.571289	840.395942
15	816.709229	821.479194	826.263048	831.060791	835.872423	840.697944

16ths	29′–0″	29′–1″	29′–2″	29′–3″	29′–4″	29′–5″
0	841.000000	845.840278	850.694444	855.562500	860.444444	865.340278
1	841.302110	846.143256	850.998291	855.867215	860.750027	865.646729
2	841.604275	846.446289	851.302192	856.171984	861.055664	865.953234
3	841.906494	846.749376	851.606147	856.476807	861.361355	866.259793
4	842.208767	847.052517	851.910156	856.781684	861.667101	866.566406
5	842.511095	847.355713	852.214220	857.086616	861.972900	866.873074
6	842.813477	847.658963	852.518338	857.391602	862.278754	867.179796
7	843.115913	847.962267	852.822510	857.696642	862.584663	867.486572
8	843.418403	848.265625	853.126736	858.001736	862.890625	867.793403
9	843.720947	848.569038	853.431017	858.306885	863.196642	868.100288
10	844.023546	848.872504	853.735352	858.612088	863.502713	868.407227
11	844.326199	849.176025	854.039741	858.917345	863.808838	868.714220
12	844.628906	849.479601	854.344184	859.222656	864.115017	869.021267
13	844.931668	849.783230	854.648682	859.528022	864.421251	869.328369
14	845.234484	850.086914	854.953234	859.833442	864.727539	869.635525
15	845.537354	850.390652	855.257840	860.138916	865.033881	869.942735

16ths	29′–6″	29′–7″	29′–8″	29′–9″	29′–10″	29′–11″
0	870.250000	875.173611	880.111111	885.062500	890.027778	895.006944
1	870.557319	875.481798	880.420166	885.372423	890.338569	895.318604
2	870.864692	875.790039	880.729275	885.682400	890.649414	895.630317
3	871.172119	876.098334	881.038439	885.992432	890.960314	895.942084
4	871.479601	876.406684	881.347656	886.302517	891.271267	896.253906
5	871.787137	876.715088	881.656928	886.612657	891.582275	896.565782
6	872.094727	877.023546	881.966254	886.922852	891.893338	896.877713
7	872.402371	877.332058	882.275635	887.233100	892.204454	897.189697
8	872.710069	877.640625	882.585069	887.543403	892.515625	897.501736
9	873.017822	877.949246	882.894558	887.853760	892.826850	897.813829
10	873.325629	878.257921	883.204102	888.164171	893.138129	898.125977
11	873.633491	878.566650	883.513699	888.474637	893.449463	898.438178
12	873.941406	878.875434	883.823351	888.785156	893.760851	898.750434
13	874.249376	879.184272	884.133057	889.095730	894.072293	899.062744
14	874.557400	879.493164	884.442817	889.406359	894.383789	899.375109
15	874.865479	879.802110	884.752631	889.717041	894.695340	899.687527

16ths	30′–0″	30′–1″	30′–2″	30′–3″	30′–4″	30′–5″
0	900.000000	905.006944	910.027778	915.062500	920.111111	925.173611
1	900.312527	905.320340	910.342041	915.377631	920.427110	925.490479
2	900.625109	905.633789	910.656359	915.692817	920.743164	925.807400
3	900.937744	905.947293	910.970730	916.008057	921.059272	926.124376
4	901.250434	906.260851	911.285156	916.323351	921.375434	926.441406
5	901.563178	906.574463	911.599637	916.638699	921.691650	926.758491
6	901.875977	906.888129	911.914171	916.954102	922.007921	927.075629
7	902.188829	907.201850	912.228760	917.269558	922.324246	927.392822
8	902.501736	907.515625	912.543403	917.585069	922.640625	927.710069
9	902.814697	907.829454	912.858100	917.900635	922.957058	928.027371
10	903.127713	908.143338	913.172852	918.216254	923.273546	928.344727
11	903.440782	908.457275	913.487657	918.531928	923.590088	928.662137
12	903.753906	908.771267	913.802517	918.847656	923.906684	928.979601
13	904.067084	909.085314	914.117432	919.163439	924.223334	929.297119
14	904.380317	909.399414	914.432400	919.479275	924.540039	929.614692
15	904.693604	909.713569	914.747423	919.795166	924.856798	929.932319

16ths	30′–6″	30′–7″	30′–8″	30′–9″	30′–10″	30′–11″
0	930.250000	935.340278	940.444444	945.562500	950.694444	955.840278
1	930.567735	935.658881	940.763916	945.882840	951.015652	956.162354
2	930.885525	935.977539	941.083442	946.203234	951.336914	956.484484
3	931.203369	936.296251	941.403022	946.523682	951.658230	956.806668
4	931.521267	936.615017	941.722656	946.844184	951.979601	957.128906
5	931.839220	936.933838	942.042345	947.164741	952.301025	957.451199
6	932.157227	937.252713	942.362088	947.485352	952.622504	957.773546
7	932.475288	937.571642	942.681885	947.806017	952.944038	958.095947
8	932.793403	937.890625	943.001736	948.126736	953.265625	958.418403
9	933.111572	938.209663	943.321642	948.447510	953.587267	958.740913
10	933.429796	938.528754	943.641602	948.768338	953.908963	959.063477
11	933.748074	938.847900	943.961616	949.089220	954.230713	959.386095
12	934.066406	939.167101	944.281684	949.410156	954.552517	959.708767
13	934.384793	939.486355	944.601807	949.731147	954.874376	960.031494
14	934.703234	939.805664	944.921984	950.052192	955.196289	960.354275
15	935.021729	940.125027	945.242215	950.373291	955.518256	960.677110

16ths	31′-0″	31′-1″	31′-2″	31′-3″	31′-4″	31′-5″
0	961.000000	966.173611	971.361111	976.562500	981.777778	987.006944
1	961.322944	966.497423	971.685791	976.888048	982.104194	987.334229
2	961.645942	966.821289	972.010525	977.213650	982.430664	987.661567
3	961.968994	967.145209	972.335314	977.539307	982.757189	987.988959
4	962.292101	967.469184	972.660156	977.865017	983.083767	988.316406
5	962.615262	967.793213	972.985053	978.190782	983.410400	988.643907
6	962.938477	968.117296	973.310004	978.516602	983.737088	988.971463
7	963.261746	968.441433	973.635010	978.842475	984.063829	989.299072
8	963.585069	968.765625	973.960069	979.168403	984.390625	989.626736
9	963.908447	969.089871	974.285183	979.494385	984.717475	989.954454
10	964.231879	969.414171	974.610352	979.820421	985.044379	990.282227
11	964.555366	969.738525	974.935574	980.146512	985.371338	990.610053
12	964.878906	970.062934	975.260851	980.472656	985.698351	990.937934
13	965.202501	970.387397	975.586182	980.798855	986.025418	991.265869
14	965.526150	970.711914	975.911567	981.125109	986.352539	991.593859
15	965.849854	971.036485	976.237006	981.451416	986.679715	991.921902

16ths	31′-6″	31′-7″	31′-8″	31′-9″	31′-10″	31′-11″
0	992.250000	997.506944	1002.777778	1008.062500	1013.361111	1018.673611
1	992.578152	997.835965	1003.107666	1008.393256	1013.692735	1019.006104
2	992.906359	998.165039	1003.437609	1008.724067	1014.024414	1019.338650
3	993.234619	998.494168	1003.767605	1009.054932	1014.356147	1019.671251
4	993.562934	998.823351	1004.097656	1009.385851	1014.687934	1020.003906
5	993.891303	999.152588	1004.427762	1009.716824	1015.019775	1020.336616
6	994.219727	999.481879	1004.757921	1010.047852	1015.351671	1020.669379
7	994.548204	999.811225	1005.088135	1010.378933	1015.683621	1021.002197
8	994.876736	1000.140625	1005.418403	1010.710069	1016.015625	1021.335069
9	995.205322	1000.470079	1005.748725	1011.041260	1016.347683	1021.667996
10	995.533963	1000.799588	1006.079102	1011.372504	1016.679796	1022.000977
11	995.862657	1001.129150	1006.409532	1011.703803	1017.011963	1022.334012
12	996.191406	1001.458767	1006.740017	1012.035156	1017.344184	1022.667101
13	996.520209	1001.788439	1007.070557	1012.366564	1017.676459	1023.000244
14	996.849067	1002.118164	1007.401150	1012.698025	1018.008789	1023.333442
15	997.177979	1002.447944	1007.731798	1013.029541	1018.341173	1023.666694

16ths	32′–0″	32′–1″	32′–2″	32′–3″	32′–4″	32′–5″
0	1024.000000	1029.340278	1034.694444	1040.062500	1045.444444	1050.840278
1	1024.333360	1029.674506	1035.029541	1040.398465	1045.781277	1051.177979
2	1024.666775	1030.008789	1035.364692	1040.734484	1046.118164	1051.515734
3	1025.000244	1030.343126	1035.699897	1041.070557	1046.455105	1051.853543
4	1025.333767	1030.677517	1036.035156	1041.406684	1046.792101	1052.191406
5	1025.667345	1031.011963	1036.370470	1041.742866	1047.129150	1052.529324
6	1026.000977	1031.346463	1036.705838	1042.079102	1047.466254	1052.867296
7	1026.334663	1031.681017	1037.041260	1042.415392	1047.803413	1053.205322
8	1026.668403	1032.015625	1037.376736	1042.751736	1048.140625	1053.543403
9	1027.002197	1032.350288	1037.712267	1043.088135	1048.477892	1053.881538
10	1027.336046	1032.685004	1038.047852	1043.424588	1048.815213	1054 219727
11	1027.669949	1033.019775	1038.383491	1043.761095	1049.152588	1054.557970
12	1028.003906	1033.354601	1038.719184	1044.097656	1049.490017	1054.896267
13	1028.337918	1033.689480	1039.054932	1044.434272	1049.827501	1055.234619
14	1028.671984	1034.024414	1039.390734	1044.770942	1050.165039	1055.573025
15	1029.006104	1034.359402	1039.726590	1045.107666	1050.502631	1055.911485

16ths	32′–6″	32′–7″	32′–8″	32′–9″	32′–10″	32′–11″
0	1056.250000	1061.673611	1067.111111	1072.562500	1078.027778	1083.506944
1	1056.588569	1062.013048	1067.451416	1072.903673	1078.369819	1083.849854
2	1056.927192	1062.352539	1067.791775	1073.244900	1078.711914	1084.192817
3	1057.265869	1062.692084	1068.132189	1073.586182	1079.054064	1084.535834
4	1057.604601	1063.031684	1068.472656	1073.927517	1079.396267	1084.878906
5	1057.943387	1063.371338	1068.813178	1074.268907	1079.738525	1085.222032
6	1058.282227	1063.711046	1069.153754	1074.610352	1080.080838	1085.565213
7	1058.621121	1064.050808	1069.494385	1074.951850	1080.423204	1085.908447
8	1058.960069	1064.390625	1069.835069	1075.293403	1080.765625	1086.251736
9	1059.299072	1064.730496	1070.175808	1075.635010	1081.108100	1086.595079
10	1059.638129	1065.070421	1070.516602	1075.976671	1081.450629	1086.938477
11	1059.977241	1065.410400	1070.857449	1076.318387	1081.793213	1087.281928
12	1060.316406	1065.750434	1071.198351	1076.660156	1082.135851	1087.625434
13	1060.655626	1066.090522	1071.539307	1077.001980	1082.478543	1087.968994
14	1060.994900	1066.430664	1071.880317	1077.343859	1082.821289	1088.312609
15	1061.334229	1066.770860	1072.221381	1077.685791	1083.164090	1088.656277

16ths	33′–0″	33′–1″	33′–2″	33′–3″	33′–4″	33′–5″
0	1089.000000	1094.506944	1100.027778	1105.562500	1111.111111	1116.673611
1	1089.343777	1094.851590	1100.373291	1105.908881	1111.458360	1117.021729
2	1089.687609	1095.196289	1100.718859	1106.255317	1111.805664	1117.369900
3	1090.031494	1095.541043	1101.064480	1106.601807	1112.153022	1117.718126
4	1090.375434	1095.885851	1101.410156	1106.948351	1112.500434	1118.066406
5	1090.719428	1096.230713	1101.755887	1107.294949	1112.847900	1118.414741
6	1091.063477	1096.575629	1102.101671	1107.641602	1113.195421	1118.763129
7	1091.407579	1096.920600	1102.447510	1107.988308	1113.542996	1119.111572
8	1091.751736	1097.265625	1102.793403	1108.335069	1113.890625	1119.460069
9	1092.095947	1097.610704	1103.139350	1108.681885	1114.238308	1119.808621
10	1092.440213	1097.955838	1103.485352	1109.028754	1114.586046	1120.157227
11	1092.784532	1098.301025	1103.831407	1109.375678	1114.933838	1120.505887
12	1093.128906	1098.646267	1104.177517	1109.722656	1115.281684	1120.854601
13	1093.473334	1098.991564	1104.523682	1110.069689	1115.629584	1121.203369
14	1093.817817	1099.336914	1104.869900	1110.416775	1115.977539	1121.552192
15	1094.162354	1099.682319	1105.216173	1110.763916	1116.325548	1121.901069

16ths	33′–6″	33′–7″	33′–8″	33′–9″	33′–10″	33′–11″
0	1122.250000	1127.840278	1133.444444	1139.062500	1144.694444	1150.340278
1	1122.598985	1128.190131	1133.795166	1139.414090	1145.046902	1150.693604
2	1122.948025	1128.540039	1134.145942	1139.765734	1145.399414	1151.046984
3	1123.297119	1128.890001	1134.496772	1140.117432	1145.751980	1151.400418
4	1123.646267	1129.240017	1134.847656	1140.469184	1146.104601	1151.753906
5	1123.995470	1129.590088	1135.198595	1140.820991	1146.457275	1152.107449
6	1124.344727	1129.940213	1135.549588	1141.172852	1146.810004	1152.461046
7	1124.694038	1130.290392	1135.900635	1141.524767	1147.162788	1152.814697
8	1125.043403	1130.640625	1136.251736	1141.876736	1147.515625	1153.168403
9	1125.392822	1130.990913	1136.602892	1142.228760	1147.868517	1153.522163
10	1125.742296	1131.341254	1136.954102	1142.580838	1148.221463	1153.875977
11	1126.091824	1131.691650	1137.305366	1142.932970	1148.574463	1154.229845
12	1126.441406	1132.042101	1137.656684	1143.285156	1148.927517	1154.583767
13	1126.791043	1132.392605	1138.008057	1143.637397	1149.280626	1154.937744
14	1127.140734	1132.743164	1138.359484	1143.989692	1149.633789	1155.291775
15	1127.490479	1133.093777	1138.710965	1144.342041	1149.987006	1155.645860

16ths	34′–0″	34′–1″	34′–2″	34′–3″	34′–4″	34′–5″
0	1156.000000	1161.673611	1167.361111	1173.062500	1178.777778	1184.506944
1	1156.354194	1162.028673	1167.717041	1173.419298	1179.135444	1184.865479
2	1156.708442	1162.383789	1168.073025	1173.776150	1179.493164	1185.224067
3	1157.062744	1162.738959	1168.429064	1174.133057	1179.850939	1185.582709
4	1157.417101	1163.094184	1168.785156	1174.490017	1180.208767	1185.941406
5	1157.771512	1163.449463	1169.141303	1174.847032	1180.566650	1186.300157
6	1158.125977	1163.804796	1169.497504	1175.204102	1180.924588	1186.658963
7	1158.480496	1164.160183	1169.853760	1175.561225	1181.282579	1187.017822
8	1158.835069	1164.515625	1170.210069	1175.918403	1181.640625	1187.376736
9	1159.189697	1164.871121	1170.566433	1176.275635	1181.998725	1187.735704
10	1159.544379	1165.226671	1170.922852	1176.632921	1182.356879	1188.094727
11	1159.899116	1165.582275	1171.279324	1176.990262	1182.715088	1188.453803
12	1160.253906	1165.937934	1171.635851	1177.347656	1183.073351	1188.812934
13	1160.608751	1166.293647	1171.992432	1177.705105	1183.431668	1189.172119
14	1160.963650	1166.649414	1172.349067	1178.062609	1183.790039	1189.531359
15	1161.318604	1167.005235	1172.705756	1178.420166	1184.148465	1189.890652

16ths	34′–6″	34′–7″	34′–8″	34′–9″	34′–10″	34′–11″
0	1190.250000	1196.006944	1201.777778	1207.562500	1213.361111	1219.173611
1	1190.609402	1196.367215	1202.138916	1207.924506	1213.723985	1219.537354
2	1190.968859	1196.727539	1202.500109	1208.286567	1214.086914	1219.901150
3	1191.328369	1197.087918	1202.861355	1208.648682	1214.449897	1220.265001
4	1191.687934	1197.448351	1203.222656	1209.010851	1214.812934	1220.628906
5	1192.047553	1197.808838	1203.584012	1209.373074	1215.176025	1220.992866
6	1192.407227	1198.169379	1203.945421	1209.735352	1215.539171	1221.356879
7	1192.766954	1198.529975	1204.306885	1210.097683	1215.902371	1221.720947
8	1193.126736	1198.890625	1204.668403	1210.460069	1216.265625	1222.085069
9	1193.486572	1199.251329	1205.029975	1210.822510	1216.628933	1222.449246
10	1193.846463	1199.612088	1205.391602	1211.185004	1216.992296	1222.813477
11	1194.206407	1199.972900	1205.753282	1211.547553	1217.355713	1223.177762
12	1194.566406	1200.333767	1206.115017	1211.910156	1217.719184	1223.542101
13	1194.926459	1200.694689	1206.476807	1212.272814	1218.082709	1223.906494
14	1195.286567	1201.055664	1206.838650	1212.635525	1218.446289	1224.270942
15	1195.646729	1201.416694	1207.200548	1212.998291	1218.809923	1224.635444

16ths	35′–0″	35′–1″	35′–2″	35′–3″	35′–4″	35′–5″
0	1225.000000	1230.840278	1236.694444	1242.562500	1248.444444	1254.340278
1	1225.364610	1231.205756	1237.060791	1242.929715	1248.812527	1254.709229
2	1225.729275	1231.571289	1237.427192	1243.296984	1249.180664	1255.078234
3	1226.093994	1231.936876	1237.793647	1243.664307	1249.548855	1255.447293
4	1226.458767	1232.302517	1238.160156	1244.031684	1249.917101	1255.816406
5	1226.823595	1232.668213	1238.526720	1244.399116	1250.285400	1256.185574
6	1227.188477	1233.033963	1238.893338	1244.766602	1250.653754	1256.554796
7	1227.553413	1233.399767	1239.260010	1245.134142	1251.022163	1256.924072
8	1227.918403	1233.765625	1239.626736	1245.501736	1251.390625	1257.293403
9	1228.283447	1234.131538	1239.993517	1245.869385	1251.759142	1257.662788
10	1228.648546	1234.497504	1240.360352	1246.237088	1252.127713	1258.032227
11	1229.013699	1234.863525	1240.727241	1246.604845	1252.496338	1258.401720
12	1229.378906	1235.229601	1241.094184	1246.972656	1252.865017	1258.771267
13	1229.744168	1235.595730	1241.461182	1247.340522	1253.233751	1259.140869
14	1230.109484	1235.961914	1241.828234	1247.708442	1253.602539	1259.510525
15	1230.474854	1236.328152	1242.195340	1248.076416	1253.971381	1259.880235

16ths	35′–6″	35′–7″	35′–8″	35′–9″	35′–10″	35′–11″
0	1260.250000	1266.173611	1272.111111	1278.062500	1284.027778	1290.006944
1	1260.619819	1266.544298	1272.482666	1278.434923	1284.401069	1290.381104
2	1260.989692	1266.915039	1272.854275	1278.807400	1284.774414	1290.755317
3	1261.359619	1267.285834	1273.225939	1279.179932	1285.147814	1291.129584
4	1261.729601	1267.656684	1273.597656	1279.552517	1285.521267	1291.503906
5	1262.099637	1268.027588	1273.969428	1279.925157	1285.894775	1291.878282
6	1262.469727	1268.398546	1274.341254	1280.297852	1286.268338	1292.252713
7	1262.839871	1268.769558	1274.713135	1280.670600	1286.641954	1292.627197
8	1263.210069	1269.140625	1275.085069	1281.043403	1287.015625	1293.001736
9	1263.580322	1269.511746	1275.457058	1281.416260	1287.389350	1293.376329
10	1263.950629	1269.882921	1275.829102	1281.789171	1287.763129	1293.750977
11	1264.320991	1270.254150	1276.201199	1282.162137	1288.136963	1294.125678
12	1264.691406	1270.625434	1276.573351	1282.535156	1288.510851	1294.500434
13	1265.061876	1270.996772	1276.945557	1282.908230	1288.884793	1294.875244
14	1265.432400	1271.368164	1277.317817	1283.281359	1289.258789	1295.250109
15	1265.802979	1271.739610	1277.690131	1283.654541	1289.632840	1295.625027

16ths	36′–0″	36′–1″	36′–2″	36′–3″	36′–4″	36′–5″
0	1296.000000	1302.006944	1308.027778	1314.062500	1320.111111	1326.173611
1	1296.375027	1302.382840	1308.404541	1314.440131	1320.489610	1326.552979
2	1296.750109	1302.758789	1308.781359	1314.817817	1320.868164	1326.932400
3	1297.125244	1303.134793	1309.158230	1315.195557	1321.246772	1327.311876
4	1297.500434	1303.510851	1309.535156	1315.573351	1321.625434	1327.691406
5	1297.875678	1303.886963	1309.912137	1315.951199	1322.004150	1328.070991
6	1298.250977	1304.263129	1310.289171	1316.329102	1322.382921	1328.450629
7	1298.626329	1304.639350	1310.666260	1316.707058	1322.761746	1328.830322
8	1299.001736	1305.015625	1311.043403	1317.085069	1323.140625	1329.210069
9	1299.377197	1305.391954	1311.420600	1317.463135	1323.519558	1329.589871
10	1299.752713	1305.768338	1311.797852	1317.841254	1323.898546	1329.969727
11	1300.128282	1306.144775	1312.175157	1318.219428	1324.277588	1330.349637
12	1300.503906	1306.521267	1312.552517	1318.597656	1324.656684	1330.729601
13	1300.879584	1306.897814	1312.929932	1318.975939	1325.035834	1331.109619
14	1301.255317	1307.274414	1313.307400	1319.354275	1325.415039	1331.489692
15	1301.631104	1307.651069	1313.684923	1319.732666	1325.794298	1331.869819

16ths	36′–6″	36′–7″	36′–8″	36′–9″	36′–10″	36′–11″
0	1332.250000	1338.340278	1344.444444	1350.562500	1356.694444	1362.840278
1	1332.630235	1338.721381	1344.826416	1350.945340	1357.078152	1363.224854
2	1333.010525	1339.102539	1345.208442	1351.328234	1357.461914	1363.609484
3	1333.390869	1339.483751	1345.590522	1351.711182	1357.845730	1363.994168
4	1333.771267	1339.865017	1345.972656	1352.094184	1358.229601	1364.378906
5	1334.151720	1340.246338	1346.354845	1352.477241	1358.613525	1364.763699
6	1334.532227	1340.627713	1346.737088	1352.860352	1358.997504	1365.148546
7	1334.912788	1341.009142	1347.119385	1353.243517	1359.381538	1365.533447
8	1335.293403	1341.390625	1347.501736	1353.626736	1359.765625	1365.918403
9	1335.674072	1341.772163	1347.884142	1354.010010	1360.149767	1366.303413
10	1336.054796	1342.153754	1348.266602	1354.393338	1360.533963	1366.688477
11	1336.435574	1342.535400	1348.649116	1354.776720	1360.918213	1367.073595
12	1336.816406	1342.917101	1349.031684	1355.160156	1361.302517	1367.458767
13	1337.197293	1343.298855	1349.414307	1355.543647	1361.686876	1367.843994
14	1337.578234	1343.680664	1349.796984	1355.927192	1362.071289	1368.229275
15	1337.959229	1344.062527	1350.179715	1356.310791	1362.455756	1368.614610

16ths	37′–0″	37′–1″	37′–2″	37′–3″	37′–4″	37′–5″
0	1369.000000	1375.173611	1381.361111	1387.562500	1393.777778	1400.006944
1	1369.385444	1375.559923	1381.748291	1387.950548	1394.166694	1400.396729
2	1369.770942	1375.946289	1382.135525	1388.338650	1394.555664	1400.786567
3	1370.156494	1376.332709	1382.522814	1388.726807	1394.944689	1401.176459
4	1370.542101	1376.719184	1382.910156	1389.115017	1395.333767	1401.566406
5	1370.927762	1377.105713	1383.297553	1389.503282	1395.722900	1401.956407
6	1371.313477	1377.492296	1383.685004	1389.891602	1396.112088	1402.346463
7	1371.699246	1377.878933	1384.072510	1390.279975	1396.501329	1402.736572
8	1372.085069	1378.265625	1384.460069	1390.668403	1396.890625	1403.126736
9	1372.470947	1378.652371	1384.847683	1391.056885	1397.279975	1403.516954
10	1372.856879	1379.039171	1385.235352	1391.445421	1397.669379	1403.907227
11	1373.242866	1379.426025	1385.623074	1391.834012	1398.058838	1404.297553
12	1373.628906	1379.812934	1386.010851	1392.222656	1398.448351	1404.687934
13	1374.015001	1380.199897	1386.398682	1392.611355	1398.837918	1405.078369
14	1374.401150	1380.586914	1386.786567	1393.000109	1399.227539	1405.468859
15	1374.787354	1380.973985	1387.174506	1393.388916	1399.617215	1405.859402

16ths	37′–6″	37′–7″	37′–8″	37′–9″	37′–10″	37′–11″
0	1406.250000	1412.506944	1418.777778	1425.062500	1431.361111	1437.673611
1	1406.640652	1412.898465	1419.170166	1425.455756	1431.755235	1438.068604
2	1407.031359	1413.290039	1419.562609	1425.849067	1432.149414	1438.463650
3	1407.422119	1413.681668	1419.955105	1426.242432	1432.543647	1438.858751
4	1407.812934	1414.073351	1420.347656	1426.635851	1432.937934	1439.253906
5	1408.203803	1414.465088	1420.740262	1427.029324	1433.332275	1439.649116
6	1408.594727	1414.856879	1421.132921	1427.422852	1433.726671	1440.044379
7	1408.985704	1415.248725	1421.525635	1427.816433	1434.121121	1440.439697
8	1409.376736	1415.640625	1421.918403	1428.210069	1434.515625	1440.835069
9	1409.767822	1416.032579	1422.311225	1428.603760	1434.910183	1441.230496
10	1410.158963	1416.424588	1422.704102	1428.997504	1435.304796	1441.625977
11	1410.550157	1416.816650	1423.097032	1429.391303	1435.699463	1442.021512
12	1410.941406	1417.208767	1423.490017	1429.785156	1436.094184	1442.417101
13	1411.332709	1417.600939	1423.883057	1430.179064	1436.488959	1442.812744
14	1411.724067	1417.993164	1424.276150	1430.573025	1436.883789	1443.208442
15	1412.115479	1418.385444	1424.669298	1430.967041	1437.278673	1443.604194

16ths	38′–0″	38′–1″	38′–2″	38′–3″	38′–4″	38′–5″
0	1444.000000	1450.340278	1456.694444	1463.062500	1469.444444	1475.840278
1	1444.395860	1450.737006	1457.092041	1463.460965	1469.843777	1476.240479
2	1444.791775	1451.133789	1457.489692	1463.859484	1470.243164	1476.640734
3	1445.187744	1451.530626	1457.887397	1464.258057	1470.642605	1477.041043
4	1445.583767	1451.927517	1458.285156	1464.656684	1471.042101	1477.441406
5	1445.979845	1452.324463	1458.682970	1465.055366	1471.441650	1477.841824
6	1446.375977	1452.721463	1459.080838	1465.454102	1471.841254	1478.242296
7	1446.772163	1453.118517	1459.478760	1465.852892	1472.240913	1478.642822
8	1447.168403	1453.515625	1459.876736	1466.251736	1472.640625	1479.043403
9	1447.564697	1453.912788	1460.274767	1466.650635	1473.040392	1479.444038
10	1447.961046	1454.310004	1460.672852	1467.049588	1473.440213	1479.844727
11	1448.357449	1454.707275	1461.070991	1467.448595	1473.840088	1480.245470
12	1448.753906	1455.104601	1461.469184	1467.847656	1474.240017	1480.646267
13	1449.150418	1455.501980	1461.867432	1468.246772	1474.640001	1481.047119
14	1449.546984	1455.899414	1462.265734	1468.645942	1475.040039	1481.448025
15	1449.943604	1456.296902	1462.664090	1469.045166	1475.440131	1481.848985

16ths	38′-6″	38′-7″	38′-8″	38′-9″	38′-10″	38′-11″
0	1482.250000	1488.673611	1495.111111	1501.562500	1508.027778	1514.506944
1	1482.651069	1489.075548	1495.513916	1501.966173	1508.432319	1514.912354
2	1483.052192	1489.477539	1495.916775	1502.369900	1508.836914	1515.317817
3	1483.453369	1489.879584	1496.319689	1502.773682	1509.241564	1515.723334
4	1483.854601	1490.281684	1496.722656	1503.177517	1509.646267	1516.128906
5	1484.255887	1490.683838	1497.125678	1503.581407	1510.051025	1516.534532
6	1484.657227	1491.086046	1497.528754	1503.985352	1510.455838	1516.940213
7	1485.058621	1491.488308	1497.931885	1504.389350	1510.860704	1517.345947
8	1485.460069	1491.890625	1498.335069	1504.793403	1511.265625	1517.751736
9	1485.861572	1492.292996	1498.738308	1505.197510	1511.670600	1518.157579
10	1486.263129	1492.695421	1499.141602	1505.601671	1512.075629	1518.563477
11	1486.664741	1493.097900	1499.544949	1506.005887	1512.480713	1518.969428
12	1487.066406	1493.500434	1499.948351	1506.410156	1512.885851	1519.375434
13	1487.468126	1493.903022	1500.351807	1506.814480	1513.291043	1519.781494
14	1487.869900	1494.305664	1500.755317	1507.218859	1513.696289	1520.187609
15	1488.271729	1494.708360	1501.158881	1507.623291	1514.101590	1520.593777

16ths	39′–0″	39′–1″	39′–2″	39′–3″	39′–4″	39′–5″
0	1521.000000	1527.506944	1534.027778	1540.562500	1547.111111	1553.673611
1	1521.406277	1527.914090	1534.435791	1540.971381	1547.520860	1554.084229
2	1521.812609	1528.321289	1534.843859	1541.380317	1547.930664	1554.494900
3	1522.218994	1528.728543	1535.251980	1541.789307	1548.340522	1554.905626
4	1522.625434	1529.135851	1535.660156	1542.198351	1548.750434	1555.316406
5	1523.031928	1529.543213	1536.068387	1542.607449	1549.160400	1555.727241
6	1523.438477	1529.950629	1536.476671	1543.016602	1549.570421	1556.138129
7	1523.845079	1530.358100	1536.885010	1543.425808	1549.980496	1556.549072
8	1524.251736	1530.765625	1537.293403	1543.835069	1550.390625	1556.960069
9	1524.658447	1531.173204	1537.701850	1544.244385	1550.800808	1557.371121
10	1525.065213	1531.580838	1538.110352	1544.653754	1551.211046	1557.782227
11	1525.472032	1531.988525	1538.518907	1545.063178	1551.621338	1558.193387
12	1525.878906	1532.396267	1538.927517	1545.472656	1552.031684	1558.604601
13	1526.285834	1532.804064	1539.336182	1545.882189	1552.442084	1559.015869
14	1526.692817	1533.211914	1539.744900	1546.291775	1552.852539	1559.427192
15	1527.099854	1533.619819	1540.153673	1546.701416	1553.263048	1559.838569

16ths	39′–6″	39′–7″	39′–8″	39′–9″	39′–10″	39′–11″
0	1560.250000	1566.840278	1573.444444	1580.062500	1586.694444	1593.340278
1	1560.661485	1567.252631	1573.857666	1580.476590	1587.109402	1593.756104
2	1561.073025	1567.665039	1574.270942	1580.890734	1587.524414	1594.171984
3	1561.484619	1568.077501	1574.684272	1581.304932	1587.939480	1594.587918
4	1561.896267	1568.490017	1575.097656	1581.719184	1588.354601	1595.003906
5	1562.307970	1568.902588	1575.511095	1582.133491	1588.769775	1595.419949
6	1562.719727	1569.315213	1575.924588	1582.547852	1589.185004	1595.836046
7	1563.131538	1569.727892	1576.338135	1582.962267	1589.600288	1596.252197
8	1563.543403	1570.140625	1576.751736	1583.376736	1590.015625	1596.668403
9	1563.955322	1570.553413	1577.165392	1583.791260	1590.431017	1597.084663
10	1564.367296	1570.966254	1577.579102	1584.205838	1590.846463	1597.500977
11	1564.779324	1571.379150	1577.992866	1584.620470	1591.261963	1597.917345
12	1565.191406	1571.792101	1578.406684	1585.035156	1591.677517	1598.333767
13	1565.603543	1572.205105	1578.820557	1585.449897	1592.093126	1598.750244
14	1566.015734	1572.618164	1579.234484	1585.864692	1592.508789	1599.166775
15	1566.427979	1573.031277	1579.648465	1586.279541	1592.924506	1599.583360

16ths	40′–0″	40′–1″	40′–2″	40′–3″	40′–4″	40′–5″
0	1600.000000	1606.673611	1613.361111	1620.062500	1626.777778	1633.506944
1	1600.416694	1607.091173	1613.779541	1620.481798	1627.197944	1633.927979
2	1600.833442	1607.508789	1614.198025	1620.901150	1627.618164	1634.349067
3	1601.250244	1607.926459	1614.616564	1621.320557	1628.038439	1634.770209
4	1601.667101	1608.344184	1615.035156	1621.740017	1628.458767	1635 191406
5	1602.084012	1608.761963	1615.453803	1622.159532	1628.879150	1635.612657
6	1602.500977	1609.179796	1615.872504	1622.579102	1629.299588	1636.033963
7	1602.917996	1609.597683	1616.291260	1622.998725	1629.720079	1636.455322
8	1603.335069	1610.015625	1616.710069	1623.418403	1630.140625	1636.876736
9	1603.752197	1610.433621	1617.128933	1623.838135	1630.561225	1637.298204
10	1604.169379	1610.851671	1617.547852	1624.257921	1630.981879	1637.719727
11	1604.586616	1611.269775	1617.966824	1624.677762	1631.402588	1638.141303
12	1605.003906	1611.687934	1618.385851	1625.097656	1631.823351	1638.562934
13	1605.421251	1612.106147	1618.804932	1625.517605	1632.244168	1638.984619
14	1605.838650	1612.524414	1619.224067	1625.937609	1632.665039	1639.406359
15	1606.256104	1612.942735	1619.643256	1626.357666	1633.085965	1639.828152

16ths	40′–6″	40′–7″	40′–8″	40′–9″	40′–10″	40′–11″
0	1640.250000	1647.006944	1653.777778	1660.562500	1667.361111	1674.173611
1	1640.671902	1647.429715	1654.201416	1660.987006	1667.786485	1674.599854
2	1641.093859	1647.852539	1654.625109	1661.411567	1668.211914	1675.026150
3	1641.515869	1648.275418	1655.048855	1661.836182	1668.637397	1675.452501
4	1641.937934	1648.698351	1655.472656	1662.260851	1669.062934	1675.878906
5	1642.360053	1649.121338	1655.890512	1662.685574	1669.488525	1676.305366
6	1642.782227	1649.544379	1656.320421	1663.110352	1669.914171	1676.731879
7	1643.204454	1649.967475	1656.744385	1663.535183	1670.339871	1677.158447
8	1643.626736	1650.390625	1657.168403	1663.960069	1670.765625	1677.585069
9	1644.049072	1650.813829	1657.592475	1664.385010	1671.191433	1678.011746
10	1644.471463	1651.237088	1658.016602	1664.810004	1671.617296	1678.438477
11	1644.893907	1651.660400	1658.440782	1665.235053	1672.043213	1678.865262
12	1645.316406	1652.083767	1658.865017	1665.660156	1672.469184	1679.292101
13	1645.738959	1652.507189	1659.289307	1666.085314	1672.895209	1679.718994
14	1646.161567	1652.930664	1659.713650	1666.510525	1673.321289	1680.145942
15	1646.584229	1653.354194	1660.138048	1666.935791	1673.747423	1680.572944

16ths	41′–0″	41′–1″	41′–2″	41′–3″	41′–4″	41′–5″
0	1681.000000	1687.840278	1694.694444	1701.562500	1708.444444	1715.340278
1	1681.427110	1688.268256	1695.123291	1701.992215	1708.875027	1715.771729
2	1681.854275	1688.696289	1695.552192	1702.421984	1709.305664	1716.203234
3	1682.281494	1689.124376	1695.981147	1702.851807	1709.736355	1716.634793
4	1682.708767	1689.552517	1696.410156	1703.281684	1710.167101	1717.066406
5	1683.136095	1689.980713	1696.839220	1703.711616	1710.597900	1717.498074
6	1683.563477	1690.408963	1697.268338	1704.141602	1711.028754	1717.929796
7	1683.990913	1690.837267	1697.697510	1704.571642	1711.459663	1718.361572
8	1684.418403	1691.265625	1698.126736	1705.001736	1711 890625	1718.793403
9	1684.845947	1691.694038	1698.556017	1705.431885	1712.321642	1719.225288
10	1685.273546	1692.122504	1698.985352	1705.862088	1712.752713	1719.657227
11	1685.701199	1692.551025	1699.414741	1706.292345	1713.183838	1720.089220
12	1686.128906	1692.979601	1699.844184	1706.722656	1713.615017	1720.521267
13	1686.556668	1693.408230	1700.273682	1707.153022	1714.046251	1720.953369
14	1636.984484	1693.836914	1700.703234	1707.583442	1714.477539	1721.385525
15	1637.412354	1694.265652	1701.132840	1708.013916	1714.908881	1721.817735

16ths	41′–6″	41′–7″	41′–8″	41′–9″	41′–10″	41′–11″
0	1722.250000	1729.173611	1736.111111	1743.062500	1750.027778	1757.006944
1	1722.682319	1729.606798	1736.545166	1743.497423	1750.463569	1757.443604
2	1723.114692	1730.040039	1736.979275	1743.932400	1750.899414	1757.880317
3	1723.547119	1730.473334	1737.413439	1744.367432	1751.335314	1758.317084
4	1723.979601	1730.906684	1737.847656	1744.802517	1751.771267	1758.753906
5	1724.412137	1731.340088	1738.281928	1745.237657	1752.207275	1759.190782
6	1724.844727	1731.773546	1738.716254	1745.672852	1752.643338	1759.627713
7	1725.277371	1732.207058	1739.150635	1746.108100	1753.079454	1760.064697
8	1725.710069	1732.640625	1739.585069	1746.543403	1753.515625	1760.501736
9	1726.142822	1733.074246	1740.019558	1746.978760	1753.951850	1760.938829
10	1726.575629	1733.507921	1740.454102	1747.414171	1754.388129	1761.375977
11	1727.008491	1733.941650	1740.888699	1747.849637	1754.824463	1761.813178
12	1727.441406	1734.375434	1741.323351	1748.285156	1755.260851	1762.250434
13	1727.874376	1734.809272	1741.758057	1748.720730	1755.697293	1762.687744
14	1728.307400	1735.243164	1742.192817	1749.156359	1756.133789	1763.125109
15	1728.740479	1735.677110	1742.627631	1749.592041	1756.570340	1763.562527

16ths	42′–0″	42′–1″	42′–2″	42′–3″	42′–4″	42′–5″
0	1764.000000	1771.006944	1778.027778	1785.062500	1792.111111	1799.173611
1	1764.437527	1771.445340	1778.467041	1785.502631	1792.552110	1799.615479
2	1764.875109	1771.883789	1778.906359	1785.942817	1792.993164	1800.057400
3	1765.312744	1772.322293	1779.345730	1786.383057	1793.434272	1800.499376
4	1765.750434	1772.760851	1779.785156	1786.823351	1793.875434	1800.941406
5	1766.188178	1773.199463	1780.224637	1787.263699	1794.316650	1801.383491
6	1766.625977	1773.638129	1780.664171	1787.704102	1794.757921	1801.825629
7	1767.063829	1774.076850	1781.103760	1788.144558	1795.199246	1802.267822
8	1767.501736	1774.515625	1781.543403	1788.585069	1795.640625	1802.710069
9	1767.939697	1774.954454	1781.983100	1789.025635	1796.082058	1803.152371
10	1768.377713	1775.393338	1782.422852	1789.466254	1796.523546	1803.594727
11	1768.815782	1775.832275	1782.862657	1789.906928	1796 965088	1804.037137
12	1769.253906	1776.271267	1783.302517	1790.347656	1797.406684	1804.479601
13	1769.692084	1776.710314	1783.742432	1790.788439	1797.848334	1804.922119
14	1770.130317	1777.149414	1784.182400	1791.229275	1798.290039	1805.364692
15	1770.568604	1777.588569	1784.622423	1791.670166	1798.731798	1805.807319

16ths	42′–6″	42′–7″	42′–8″	42′–9″	42′–10″	42′–11″
0	1806.250000	1813.340278	1820.444444	1827.562500	1834.694444	1841.840278
1	1806.692735	1813.783881	1820.888916	1828.007840	1835.140652	1842.287354
2	1807.135525	1814.227539	1821.333442	1828.453234	1835.586914	1842.734484
3	1807.578369	1814.671251	1821.778022	1828.898682	1836.033230	1843.181668
4	1808.021267	1815.115017	1822.222656	1829.344184	1836.479601	1843.628906
5	1808.464220	1815.558838	1822.667345	1829.789741	1836.926025	1844.076199
6	1808.907227	1816.002713	1823.112088	1830.235352	1837.372504	1844.523546
7	1809.350288	1816.446642	1823.556885	1830.681017	1837.819038	1844.970947
8	1809.793403	1816.890625	1824.001736	1831.126736	1838.265625	1845.418403
9	1810.236572	1817.334663	1824.446642	1831.572510	1838.712267	1845.865913
10	1810.679796	1817.778754	1824.891602	1832.018338	1839.158963	1846.313477
11	1811.123074	1818.222900	1825.336616	1832.464220	1839.605713	1846.761095
12	1811.566406	1818.667101	1825.781684	1832.910156	1840.052517	1847.208767
13	1812.009793	1819.111355	1826.226807	1833.356147	1840.499376	1847.656494
14	1812.453234	1819.555664	1826.671984	1833.802192	1840.946289	1848.104275
15	1812.896729	1820.000027	1827.117215	1834.248291	1841.393256	1848.552110

16ths	43′–0″	43′–1″	43′–2″	43′–3″	43′–4″	43′–5″
0	1849.000000	1856.173611	1863.361111	1870.562500	1877.777778	1885.006944
1	1849.447944	1856.622423	1863.810791	1871.013048	1878.229194	1885.459229
2	1849.895942	1857.071289	1864.260525	1871.463650	1878.680664	1885.911567
3	1850.343994	1857.520209	1864.710314	1871.914307	1879.132189	1886.363959
4	1850.792101	1857.969184	1865.160156	1872.365017	1879.583767	1886.816406
5	1851.240262	1858.418213	1865.610053	1872.815782	1880.035400	1887.268907
6	1851.688477	1858.867296	1866.060004	1873.266602	1880.487088	1887.721463
7	1852.136746	1859.316433	1866.510010	1873.717475	1880.938829	1888.174072
8	1852.585069	1859.765625	1866.960069	1874.168403	1881.390625	1888.626736
9	1853.033447	1860.214871	1867.410183	1874.619385	1881.842475	1889.079454
10	1853.481879	1860.664171	1867.860352	1875.070421	1882.294379	1889.532227
11	1853.930366	1861.113525	1868.310574	1875.521512	1882 746338	1889.985053
12	1854.378906	1861.562934	1868.760851	1875.972656	1883.198351	1890.437934
13	1854.827501	1862.012397	1869.211182	1876 423855	1883.650418	1890.890869
14	1855.276150	1862.461914	1869.661567	1876.875109	1884.102539	1891.343859
15	1855.724854	1862.911485	1870.112006	1877.326416	1884.554715	1891.796902

16ths	43′–6″	43′–7″	43′–8″	43′–9″	43′–10″	43′–11″
0	1892.250000	1899.506944	1906.777778	1914.062500	1921.361111	1928.673611
1	1892.703152	1899.960965	1907.232666	1914.518256	1921.817735	1929.131104
2	1893.156359	1900.415039	1907.687609	1914.974067	1922.274414	1929.588650
3	1893.609619	1900.869168	1908.142605	1915.429932	1922.731147	1930.046251
4	1894.062934	1901.323351	1908.597656	1915.885851	1923.187934	1930.503906
5	1894.516303	1901.777588	1909.052762	1916.341824	1923.644775	1930.961616
6	1894.969727	1902.231879	1909.507921	1916.797852	1924.101671	1931.419379
7	1895.423204	1902.686225	1909.963135	1917.253933	1924.558621	1931.877197
8	1895.876736	1903.140625	1910.418403	1917.710069	1925.015625	1932.335069
9	1896.330322	1903.595079	1910.873725	1918.166260	1925.472683	1932.792996
10	1896.783963	1904.049588	1911.329102	1918.622504	1925.929796	1933.250977
11	1897.237657	1904.504150	1911.784532	1919.078803	1926.386963	1933.709012
12	1897.691406	1904.958767	1912.240017	1919.535156	1926.844184	1934.167101
13	1898.145209	1905.413439	1912.695557	1919.991564	1927.301459	1934.625244
14	1898.599067	1905.868164	1913.151150	1920.448025	1927.758789	1935.083442
15	1899.052979	1906.322944	1913.606798	1920.904541	1928.216173	1935.541694

16ths	44′–0″	44′–1″	44′–2″	44′–3″	44′–4″	44′–5″
0	1936.000000	1943.340278	1950.694444	1958.062500	1965.444444	1972.840278
1	1936.458360	1943.799506	1951.154541	1958.523465	1965.906277	1973.302979
2	1936.916775	1944.258789	1951.614692	1958.984484	1966.368164	1973.765734
3	1937.375244	1944.718126	1952.074897	1959.445557	1966.830105	1974.228543
4	1937.833767	1945.177517	1952.535156	1959.906684	1967.292101	1974.691406
5	1938.292345	1945.636963	1952.995470	1960.367866	1967.754150	1975.154324
6	1938.750977	1946.096463	1953.455838	1960.829102	1968.216254	1975.617296
7	1939.209663	1946.556017	1953.916260	1961.290392	1968.678413	1976.080322
8	1939.668403	1947.015625	1954.376736	1961.751736	1969.140625	1976.543403
9	1940.127197	1947.475288	1954.837267	1962.213135	1969.602892	1977.006538
10	1940.586046	1947.935004	1955.297852	1962.674588	1970.065213	1977.469727
11	1941.044949	1948.394775	1955.758491	1963.136095	1970.527588	1977.932970
12	1941.503906	1948.854601	1956.219184	1963.597656	1970.990017	1978.396267
13	1941.962918	1949.314480	1956.679932	1964.059272	1971.452501	1978.859619
14	1942.421984	1949.774414	1957.140734	1964.520942	1971.915039	1979.323025
15	1942.881104	1950.234402	1957.601590	1964.982666	1972.377631	1979.786485

16ths	44′-6″	44′-7″	44′-8″	44′-9″	44′-10″	44′-11″
0	1980.250000	1987.673611	1995.111111	2002.562500	2010.027778	2017.506944
1	1980.713569	1988.138048	1995.576416	2003.028673	2010.494819	2017.974854
2	1981.177192	1988.602539	1996.041775	2003.494900	2010.961914	2018.442817
3	1981.640869	1989.067084	1996.507189	2003.961182	2011.429064	2018.910834
4	1982.104601	1989.531684	1996.972656	2004.427517	2011.896267	2019.378906
5	1982.568387	1989.996338	1997.438178	2004.893907	2012.363525	2019.847032
6	1983.032227	1990.461046	1997.903754	2005.360352	2012.830838	2020.315213
7	1983.496121	1990.925808	1998.369385	2005.826850	2013.298204	2020.783447
8	1983.960069	1991.390625	1998.835069	2006.293403	2013.765625	2021.251736
9	1984.424072	1991.855496	1999.300808	2006.760010	2014.233100	2021.720079
10	1984.888129	1992.320421	1999.766602	2007.226671	2014.700629	2022.188477
11	1985.352241	1992.785400	2000.232449	2007.693387	2015.168213	2022.656928
12	1985.816406	1993.250434	2000.698351	2008.160156	2015.635851	2023.125434
13	1986.280626	1993.715522	2001.164307	2008.626980	2016.103543	2023.593994
14	1986.744900	1994.180664	2001.630317	2009.093859	2016.571289	2024.062609
15	1987.209229	1994.645860	2002.096381	2009.560791	2017.039090	2024.531277

16ths	45′–0″	45′–1″	45′–2″	45′–3″	45′–4″	45′–5″
0	2025.000000	2032.506944	2040.027778	2047.562500	2055.111111	2062.673611
1	2025.468777	2032.976590	2040.498291	2048.033881	2055.583360	2063.146729
2	2025.937609	2033.446289	2040.968859	2048.505317	2056.055664	2063.619900
3	2026.406494	2033.916043	2041.439480	2048.976807	2056.528022	2064.093126
4	2026.875434	2034.385851	2041.910156	2049.448351	2057.000434	2064.566406
5	2027.344428	2034.855713	2042.380887	2049.919949	2057.472900	2065.039741
6	2027.813477	2035.325629	2042.851671	2050.391602	2057.945421	2065.513129
7	2028.282579	2035.795600	2043.322510	2050.863308	2058.417996	2065.986572
8	2028.751736	2036.265625	2043.793403	2051.335069	2058.890625	2066.460069
9	2029.220947	2036.735704	2044.264350	2051.806885	2059.363308	2066.933621
10	2029.690213	2037.205838	2044.735352	2052.278754	2059.836046	2067.407227
11	2030.159532	2037.676025	2045.206407	2052.750678	2060.308838	2067.880887
12	2030.628906	2038.146267	2045.677517	2053.222656	2060.781684	2068.354601
13	2031.098334	2038.616564	2046.148682	2053.694689	2061.254584	2068.828369
14	2031.567817	2039.086914	2046.619900	2054.166775	2061.727539	2069.302192
15	2032.037354	2039.557319	2047.091173	2054.638916	2062.200548	2069.776069

16ths	45′–6″	45′–7″	45′–8″	45′–9″	45′–10″	45′–11″
0	2070.250000	2077.840278	2085.444444	2093.062500	2100.694444	2108.340278
1	2070.723985	2078.315131	2085.920166	2093.539090	2101.171902	2108.818604
2	2071.198025	2078.790039	2086.395942	2094.015734	2101.649414	2109.296984
3	2071.672119	2079.265001	2086.871772	2094.492432	2102.126980	2109.775418
4	2072.146267	2079.740017	2087.347656	2094.969184	2102.604601	2110.253906
5	2072.620470	2080.215088	2087.823595	2095.445991	2103.082275	2110.732449
6	2073.094727	2080.690213	2088.299588	2095.922852	2103.560004	2111.211046
7	2073.569038	2081.165392	2088.775635	2096.399767	2104.037788	2111.689697
8	2074.043403	2081.640625	2089.251736	2096.876736	2104.515625	2112.168403
9	2074.517822	2082.115913	2089.727892	2097.353760	2104.993517	2112.647163
10	2074.992296	2082.591254	2090.204102	2097.830838	2105.471463	2113.125977
11	2075.466824	2083.066650	2090.680366	2098.307970	2105.949463	2113.604845
12	2075.941406	2083.542101	2091.156684	2098.785156	2106.427517	2114.083767
13	2076.416043	2084.017605	2091.633057	2099.262397	2106.905626	2114 562744
14	2076.890734	2084.493164	2092.109484	2099.739692	2107.383789	2115.041775
15	2077.365479	2084.968777	2092.585965	2100.217041	2107.862006	2115.520860

16ths	46′–0″	46′–1″	46′–2″	46′–3″	46′–4″	46′–5″
0	2116.000000	2123.673611	2131.361111	2139.062500	2146.777778	2154.506944
1	2116.479194	2124.153673	2131.842041	2139.544298	2147.260444	2154.990479
2	2116.958442	2124.633789	2132.323025	2140.026150	2147.743164	2155.474067
3	2117.437744	2125.113959	2132.804064	2140.508057	2148.225939	2155.957709
4	2117.917101	2125.594184	2133.285156	2140.990017	2148.708767	2156.441406
5	2118.396512	2126.074463	2133.766303	2141.472032	2149.191650	2156.925157
6	2118.875977	2126.554796	2134.247504	2141.954102	2149.674588	2157.408963
7	2119.355496	2127.035183	2134.728760	2142.436225	2150.157579	2157.892822
8	2119.835069	2127.515625	2135.210069	2142.918403	2150.640625	2158.376736
9	2120.314697	2127.996121	2135.691433	2143.400635	2151.123725	2158.860704
10	2120.794379	2128.476671	2136.172852	2143.882921	2151.606879	2159.344727
11	2121.274116	2128.957275	2136.654324	2144.365262	2152.090088	2159.828803
12	2121.753906	2129.437934	2137.135851	2144.847656	2152.573351	2160.312934
13	2122.233751	2129.918647	2137.617432	2145.330105	2153.056668	2160.797119
14	2122.713650	2130.399414	2138.099067	2145.812609	2153.540039	2161.281359
15	2123.193604	2130.880235	2138.580756	2146.295166	2154.023465	2161.765652

16ths	46′–6″	46′–7″	46′–8″	46′–9″	46′–10″	46′–11″
0	2162.250000	2170.006944	2177.777778	2185.562500	2193.361111	2201.173611
1	2162.734402	2170.492215	2178.263916	2186.049506	2193.848985	2201.662354
2	2163.218859	2170.977539	2178.750109	2186.536567	2194.336914	2202.151150
3	2163.703369	2171.462918	2179.236355	2187.023682	2194.824897	2202.640001
4	2164.187934	2171.948351	2179.722656	2187.510851	2195.312934	2203.128906
5	2164.672553	2172.433838	2180.209012	2187.998074	2195.801025	2203.617866
6	2165.157227	2172.919379	2180.695421	2188.485352	2196.289171	2204.106879
7	2165.641954	2173.404975	2181.181885	2188.972683	2196.777371	2204.595947
8	2166.126736	2173.890625	2181.668403	2189.460069	2197.265625	2205.085069
9	2166.611572	2174.376329	2182.154975	2189.947510	2197.753933	2205.574246
10	2167.096463	2174.862088	2182.641602	2190.435004	2198.242296	2206.063477
11	2167.581407	2175.347900	2183.128282	2190.922553	2198.730713	2206.552762
12	2168.066406	2175.833767	2183.615017	2191.410156	2199.219184	2207.042101
13	2168.551459	2176.319689	2184.101807	2191.897814	2199.707709	2207.531494
14	2169.036567	2176.805664	2184.588650	2192.385525	2200.196289	2208.020942
15	2169.521729	2177.291694	2185.075548	2192.873291	2200.684923	2208.510444

16ths	47′-0″	47′-1″	47′-2″	47′-3″	47′-4″	47′-5″
0	2209.000000	2216.840278	2224.694444	2232.562500	2240.444444	2248.340278
1	2209.489610	2217.330756	2225.185791	2233.054715	2240.937527	2248.834229
2	2209.979275	2217.821289	2225.677192	2233.546984	2241.430664	2249.328234
3	2210.468994	2218.311876	2226.168647	2234.039307	2241.923355	2249.822293
4	2210.958767	2218.802517	2226.660156	2234.531684	2242.417101	2250.316406
5	2211.448595	2219.293213	2227.151720	2235.024116	2242.910400	2250.810574
6	2211.938477	2219.783963	2227.643338	2235.516602	2243.403754	2251.304796
7	2212.438413	2220.274767	2228.135010	2236.009142	2243.897163	2251.799072
8	2212.918403	2220.765625	2228.626736	2236.501736	2244.390625	2252.293403
9	2213.408447	2221.256538	2229.118517	2236.994385	2244.884142	2252.787788
10	2213.898546	2221.747504	2229.610352	2237.487088	2245.377713	2253.282227
11	2214.388699	2222.238525	2230.102241	2237.979845	2245.871338	2253.776720
12	2214.878906	2222.729601	2230.594184	2238.472656	2246.365017	2254.271267
13	2215.369168	2223.220730	2231.086182	2238.965522	2246.858751	2254.765869
14	2215.859484	2223.711914	2231.578234	2239.458442	2247.352539	2255.260525
15	2216.349854	2224.203152	2232.070340	2239.951416	2247.846381	2255.755235

16ths	47′–6″	47′–7″	47′–8″	47′–9″	47′–10″	47′–11″
0	2256.250000	2264.173611	2272.111111	2280.062500	2288.027778	2296.006944
1	2256.744819	2264.669298	2272.607666	2280.559923	2288.526069	2296.506104
2	2257.239692	2265.165039	2273.104275	2281.057400	2289.024414	2297.005317
3	2257.734619	2265.660834	2273.600939	2281.554932	2289.522814	2297.504584
4	2258.229601	2266.156684	2274.097656	2282.052517	2290.021267	2298.003906
5	2258.724637	2266.652588	2274.594428	2282.540157	2290.519775	2298.503282
6	2259.219727	2267.148546	2275.091254	2283.047852	2291.018338	2299.002713
7	2259.714871	2267.644558	2275.588135	2283.545600	2291.516954	2299.502197
8	2260.210069	2268.140625	2276.085069	2284.043403	2292.015625	2300.001736
9	2260.705322	2268.636746	2276.582058	2284.541260	2292.514350	2300.501329
10	2261.200629	2269.132921	2277.079102	2285.039171	2293.013129	2301.000977
11	2261.695991	2269.629150	2277.576199	2285.537137	2293.511963	2301.500678
12	2262.191406	2270.125434	2278.073351	2286.035156	2294.010851	2302.000434
13	2262.686876	2270.621772	2278.570557	2286.533230	2294.509793	2302.500244
14	2263.182400	2271.118164	2279.067817	2287.031359	2295.008789	2303.000109
15	2263.677979	2271.614610	2279.565131	2287.529541	2295.507840	2303.500027

16ths	48′–0″	48′–1″	48′–2″	48′–3″	48′–4″	48′–5″
0	2304.000000	2312.006944	2320.027778	2328.062500	2336.111111	2344.173611
1	2304.500027	2312.507840	2320.529541	2328.565131	2336.614610	2344.677979
2	2305.000109	2313.008789	2321.031359	2329.067817	2337.118164	2345.182400
3	2305.500244	2313.509793	2321.533230	2329.570557	2337.621772	2345.686876
4	2306.000434	2314.010851	2322.035156	2330.073351	2338.125434	2346.191406
5	2306.500678	2314.511963	2322.537137	2330.576199	2338.629150	2346.695991
6	2307.000977	2315.013129	2323.039171	2331.079102	2339.132921	2347.200629
7	2307.501329	2315.514350	2323.541260	2331.582058	2339.636746	2347.705322
8	2308.001736	2316.015625	2324.043403	2332.085069	2340.140625	2348.210069
9	2308.502197	2316.516954	2324.545600	2332.588135	2340.644558	2348.714871
10	2309.002713	2317.018338	2325.047852	2333.091254	2341.148546	2349.219727
11	2309.503282	2317.519775	2325.550157	2333.594428	2341.652588	2349.724637
12	2310.003906	2318.021267	2326.052517	2334.097656	2342.156684	2350.229601
13	2310.504584	2318.522814	2326.554932	2334.600939	2342.660834	2350.734619
14	2311.005317	2319.024414	2327.057400	2335.104275	2343.165039	2351.239692
15	2311.506104	2319.526069	2327.559923	2335.607666	2343.669298	2351.744819

16ths	48′–6″	48′–7″	48′–8″	48′–9″	48′–10″	48′–11″
0	2352.250000	2360.340278	2368.444444	2376.562500	2384.694444	2392.840278
1	2352.755235	2360.846381	2368.951416	2377.070340	2385.203152	2393.349854
2	2353.260525	2361.352539	2369.458442	2377.578234	2385.711914	2393.859484
3	2353.765869	2361.858751	2369.965522	2378.086182	2386.220730	2394.369168
4	2354.271267	2362.365017	2370.472656	2378.594184	2386.729601	2394.878906
5	2354.776720	2362.871338	2370.979845	2379.102241	2387.238525	2395.388699
6	2355.282227	2363.377713	2371.487088	2379.610352	2387.747504	2395.898546
7	2355.787788	2363.884142	2371.994385	2380.118517	2388.256538	2396.408447
8	2356.293403	2364.390625	2372.501736	2380.626736	2388.765625	2396.918403
9	2356.799072	2364.897163	2373.009142	2381.135010	2389.274767	2397.428413
10	2357.304796	2365.403754	2373.516602	2381.643338	2389.783963	2397.938477
11	2357.810574	2365.910400	2374.024116	2382.151720	2390.293213	2398.448595
12	2358.316406	2366.417101	2374.531684	2382.660156	2390.802517	2398.958767
13	2358.822293	2366.923855	2375.039307	2383.168647	2391.311876	2399.468994
14	2359.328234	2367.430664	2375.546984	2383.677192	2391.821289	2399.979275
15	2359.834229	2367.937527	2376.054715	2384.185791	2392.330756	2400.489610

16ths	49′–0″	49′–1″	49′–2″	49′–3″	49′–4″	49′–5″
0	2401.000000	2409.173611	2417.361111	2425.562500	2433.777778	2442.006944
1	2401.510444	2409.684923	2417.873291	2426.075548	2434.291694	2442.521729
2	2402.020942	2410.196289	2418.385525	2426.588650	2434.805664	2443.036567
3	2402.531494	2410.707709	2418.897814	2427.101807	2435.319689	2443.551459
4	2403.042101	2411.219184	2419.410156	2427.615017	2435.833767	2444.066406
5	2403.552762	2411.730713	2419.922553	2428.128282	2436.347900	2444.581407
6	2404.063477	2412.242296	2420.435004	2428.641602	2436.862088	2445.096463
7	2404.574246	2412.753933	2420.947510	2429.154975	2437.376329	2445.611572
8	2405.085069	2413.265625	2421.460069	2429.668403	2437.890625	2446.126736
9	2405.595947	2413.777371	2421.972683	2430.181885	2438.404975	2446.641954
10	2406.106879	2414.289171	2422 485352	2430.695421	2438.919379	2447.157227
11	2406.617866	2414.801025	2422.998074	2431.209012	2439.433838	2447.672553
12	2407.128906	2415.312934	2423.510851	2431.722656	2439.948351	2448.187934
13	2407.640001	2415.824897	2424.023682	2432.236355	2440.462918	2448.703369
14	2408.151150	2416.336914	2424.536567	2432.750109	2440.977539	2449.218859
15	2408.662354	2416.848985	2425.049506	2433.263916	2441.492215	2449.734402

16ths	49′–6″	49′–7″	49′–8″	49′–9″	49′–10″	49′–11″
0	2450.250000	2458.506944	2466.777778	2475.062500	2483.361111	2491.673611
1	2450.765652	2459.023465	2467.295166	2475.580756	2483.880235	2492.193604
2	2451.281359	2459.540039	2467.812609	2476.099067	2484.399414	2492.713650
3	2451.797119	2460.056668	2468.330105	2476.617432	2484.918647	2493.233751
4	2452.312934	2460.573351	2468.847656	2477.135851	2485.437934	2493.753906
5	2452.828803	2461.090088	2469.365262	2477.654324	2485.957275	2494.274116
6	2453.344727	2461.606879	2469.882921	2478.172852	2486.476671	2494.794379
7	2453.860704	2462.123725	2470.400635	2478.691433	2486.996121	2495.314697
8	2454.376736	2462.640625	2470.918403	2479.210069	2487.515625	2495.835069
9	2454.892822	2463.157579	2471.436225	2479.728760	2488.035183	2496.355496
10	2455.408963	2463.674588	2471.954102	2480.247504	2488.554796	2496.875977
11	2455.925157	2464.191650	2472.472032	2480.766303	2489.074463	2497.396512
12	2456.441406	2464.708767	2472.990017	2481.285156	2489.594184	2497.917101
13	2456.957709	2465.225939	2473.508057	2481.804064	2490.113959	2498.437744
14	2457.474067	2465 743164	2474.026150	2482.323025	2490.633789	2498.958442
15	2457.990479	2466.260444	2474.544298	2482.842041	2491.153673	2499.479194

16ths	50′–0″	50′–1″	50′–2″	50′–3″	50′–4″	50′–5″
0	2500.000000	2508.340278	2516.694444	2525.062500	2533.444444	2541.840278
1	2500.520860	2508.862006	2517.217041	2525.585965	2533.968777	2542.365479
2	2501.041775	2509.383789	2517.739692	2526.109484	2534.493164	2542.890734
3	2501.562744	2509.905626	2518.262397	2526.633057	2535.017605	2543.416043
4	2502.083767	2510.427517	2518.785156	2527.156684	2535.542101	2543.941406
5	2502.604845	2510.949463	2519.307970	2527.680366	2536.066650	2544.466824
6	2503.125977	2511.471463	2519.830838	2528.204102	2536.591254	2544.992296
7	2503.647163	2511.993517	2520.353760	2528.727892	2537.115913	2545.517822
8	2504.168403	2512.515625	2520.876736	2529.251736	2537.640625	2546.043403
9	2504.689697	2513.037788	2521.399767	2529.775635	2538.165392	2546.569038
10	2505.211046	2513.560004	2521.922852	2530.299588	2538.690213	2547.094727
11	2505.732449	2514.082275	2522.445991	2530.823595	2539.215088	2547.620470
12	2506.253906	2514.604601	2522.969184	2531.347656	2539.740017	2548.146267
13	2506.775418	2515.126980	2523.492432	2531.871772	2540.265001	2548.672119
14	2507.296984	2515.649414	2524.015734	2532.395942	2540.790039	2549.198025
15	2507.818604	2516.171902	2524.539090	2532.920166	2541.315131	2549.723985

16ths	50′–6″	50′–7″	50′–8″	50′–9″	50′–10″	50′–11″
0	2550.250000	2558.673611	2567.111111	2575.562500	2584.027778	2592.506944
1	2550.776069	2559.200548	2567.638916	2576.091173	2584.557319	2593.037354
2	2551.302192	2559.727539	2568.166775	2576.619900	2585.086914	2593.567817
3	2551.828369	2560.254584	2568.694689	2577.148682	2585.616564	2594.098334
4	2552.354601	2560.781684	2569.222656	2577.677517	2586.146267	2594.628906
5	2552.880887	2561.308838	2569.750678	2578.206407	2586.676025	2595.159532
6	2553.407227	2561.836046	2570.278754	2578.735352	2587.205838	2595.690213
7	2553.933621	2562.363308	2570.806885	2579.264350	2587.735704	2596.220947
8	2554.460069	2562.890625	2571.335069	2579.793403	2588.265625	2596.751736
9	2554.986572	2563.417996	2571.863308	2580.322510	2588.795600	2597.282579
10	2555.513129	2563.945421	2572.391602	2580.851671	2589.325629	2597.813477
11	2556.039741	2564.472900	2572.919949	2581.380887	2589.855713	2598.344428
12	2556.566406	2565.000434	2573.448351	2581.910156	2590.385851	2598.875434
13	2557.093126	2565.528022	2573.976807	2582.439480	2590.916043	2599.406494
14	2557.619900	2566.055664	2574.505317	2582.968859	2591.446289	2599.937609
15	2558.146729	2566.583360	2575.033881	2583.498291	2591.976590	2600.468777

16ths	51′–0″	51′–1″	51′–2″	51′–3″	51′–4″	51′–5″
0	2601.000000	2609.506944	2618.027778	2626.562500	2635.111111	2643 673611
1	2601.531277	2610.039090	2618.560791	2627.096381	2635.645860	2644.209229
2	2602.062609	2610.571289	2619.093859	2627.630317	2636.180664	2644.744900
3	2602.593994	2611.103543	2619.626980	2628.164307	2636.715522	2645.280626
4	2603.125434	2611.635851	2620.160156	2628.698351	2637.250434	2645.816406
5	2603.656928	2612.168213	2620.693387	2629.232449	2637.785400	2646.352241
6	2604.188477	2612.700629	2621.226671	2629.766602	2638.320421	2646.888129
7	2604.720079	2613.233100	2621.760010	2630.300808	2638.855496	2647.424072
8	2605.251736	2613.765625	2622.293403	2630.835069	2639.390625	2647.960069
9	2605.783447	2614.298204	2622.826850	2631.369385	2639.925808	2648.496121
10	2606.315213	2614.830838	2623.360352	2631.903754	2640.461046	2649.032227
11	2606.847032	2615.363525	2623.893907	2632.438178	2640.996338	2649.568387
12	2607.378906	2615.896267	2624.427517	2632.972656	2641.531684	2650.104601
13	2607.910834	2616.429064	2624.961182	2633.507189	2642.067084	2650.640869
14	2608.442817	2616.961914	2625.494900	2634.041775	2642.602539	2651.177192
15	2608.974854	2617.494819	2626.028673	2634.576416	2643.138048	2651.713569

16ths	51′–6″	51′–7″	51′–8″	51′–9″	51′–10″	51′–11″
0	2652.250000	2660.840278	2669.444444	2678.062500	2686.694444	2695.340278
1	2652.786485	2661.377631	2669.982666	2678.601590	2687.234402	2695.881104
2	2653.323025	2661.915039	2670.520942	2679.140734	2687.774414	2696.421984
3	2653.859619	2662.452501	2671.059272	2679.679932	2688.314480	2696.962918
4	2654.396267	2662.990017	2671.597656	2680.219184	2688.854601	2697.503906
5	2654.932970	2663.527588	2672.136095	2680.758491	2689.394775	2698.044949
6	2655.469727	2664.065213	2672.674588	2681.297852	2689.935004	2698.586046
7	2656.006538	2664.602892	2673.213135	2681.837267	2690.475288	2699.127197
8	2656.543403	2665.140625	2673.751736	2682.376736	2691.015625	2699.668403
9	2657.080322	2665.678413	2674.290392	2682.916260	2691.556017	2700.209663
10	2657.617296	2666.216254	2674.829102	2683.455838	2692.096463	2700.750977
11	2658.154324	2666.754150	2675.367866	2683.995470	2692.636963	2701.292345
12	2658.691406	2667.292101	2675.906684	2684.535156	2693.177517	2701.833767
13	2659.228543	2667.830105	2676.445557	2685.074897	2693.718126	2702.375244
14	2659.765734	2668.368164	2676.984484	2685.614692	2694.258789	2702.916775
15	2660.302979	2668.906277	2677.523465	2686.154541	2694.799506	2703.458360

16ths	52′–0″	52′–1″	52′–2″	52′–3″	52′–4″	52′–5″
0	2704.000000	2712.673611	2721.361111	2730.062500	2738.777778	2747.506944
1	2704.541694	2713.216173	2721.904541	2730.606798	2739.322944	2748.052979
2	2705.083442	2713.758789	2722.448025	2731.151150	2739.868164	2748.599067
3	2705.625244	2714.301459	2722.991564	2731.695557	2740.413439	2749.145209
4	2706.167101	2714.844184	2723.535156	2732.240017	2740.958767	2749.691406
5	2706.709012	2715.386963	2724.078803	2732.784532	2741.504150	2750.237657
6	2707.250977	2715.929796	2724.622504	2733.329102	2742.049588	2750.783963
7	2707.792996	2716.472683	2725.166260	2733.873725	2742.595079	2751.330322
8	2708.335069	2717.015625	2725.710069	2734.418403	2743.140625	2751.876736
9	2708.877197	2717.558621	2726.253933	2734.963135	2743.686225	2752.423204
10	2709.419379	2718.101671	2726.797852	2735.507921	2744.231879	2752.969727
11	2709.961616	2718.644775	2727.341824	2736.052762	2744.777588	2753.516303
12	2710.503906	2719.187934	2727.885851	2736.597656	2745.323351	2754.062934
13	2711.046251	2719.731147	2728.429932	2737.142605	2745.869168	2754.609619
14	2711.588650	2720.274414	2728.974067	2737.687609	2746.415039	2755.156359
15	2712.131104	2720.817735	2729.518256	2738.232666	2746.960965	2755.703152

16ths	52′–6″	52′–7″	52′–8″	52′–9″	52′–10″	52′–11″
0	2756.250000	2765.006944	2773.777778	2782.562500	2791.361111	2800.173611
1	2756.796902	2765.554715	2774.326416	2783.112006	2791.911485	2800.724854
2	2757.343859	2766.102539	2774.875109	2783.661567	2792.461914	2801.276150
3	2757.890869	2766.650418	2775.423855	2784.211182	2793.012397	2801.827501
4	2758.437934	2767.198351	2775.972656	2784.760851	2793.562934	2802.378906
5	2758.985053	2767.746338	2776.521512	2785.310574	2794.113525	2802.930366
6	2759.532227	2768.294379	2777.070421	2785.860352	2794.664171	2803.481879
7	2760.079454	2768.842475	2777.619385	2786.410183	2795.214871	2804.033447
8	2760.626736	2769.390625	2778.168403	2786.960069	2795.765625	2804.585069
9	2761.174072	2769.938829	2778.717475	2787.510010	2796.316433	2805.136746
10	2761.721463	2770.487088	2779.266602	2788.060004	2796.867296	2805.688477
11	2762.268907	2771.035400	2779.815782	2788.610053	2797.418213	2806.240262
12	2762.816406	2771.583767	2780.365017	2789.160156	2797.969184	2806.792101
13	2763.363959	2772.132189	2780.914307	2789.710314	2798.520209	2807.343994
14	2763.911567	2772.680664	2781.463650	2790.260525	2799.071289	2807.895942
15	2764.459229	2773.229194	2782.013048	2790.810791	2799.622423	2808.447944

16ths	53′–0″	53′–1″	53′–2″	53′–3″	53′–4″	53′–5″
0	2809.000000	2817.840278	2826.694444	2835.562500	2844.444444	2853.340278
1	2809.552110	2818.393256	2827.248291	2836.117215	2845.000027	2853.896729
2	2810.104275	2818.946289	2827.802192	2836.671984	2845.555664	2854.453234
3	2810.656494	2819.499376	2828.356147	2837.226807	2846.111355	2855.009793
4	2811.208767	2820.052517	2828.910156	2837.781684	2846.667101	2855.566406
5	2811.761095	2820.605713	2829.464220	2838.336616	2847.222900	2856.123074
6	2812.313477	2821.158963	2830.018338	2838.891602	2847.778754	2856.679796
7	2812.865913	2821.712267	2830.572510	2839.446642	2848.334663	2857.236572
8	2813.418403	2822.265625	2831.126736	2840.001736	2848.890625	2857.793403
9	2813.970947	2822.819038	2831.681017	2840.556885	2849.446642	2858.350288
10	2814.523546	2823.372504	2832.235352	2841.112088	2850.002713	2858.907227
11	2815.076199	2823.926025	2832.789741	2841.667345	2850.558838	2859.464220
12	2815.628906	2824.479601	2833.344184	2842.222656	2851.115017	2860.021267
13	2816.181668	2825.033230	2833.898682	2842.778022	2851.671251	2860.578369
14	2816.734484	2825.586914	2834.453234	2843.333442	2852.227539	2861.135525
15	2817.287354	2826.140652	2835.007840	2843.888916	2852.783881	2861.692735

16ths	53′–6″	53′–7″	53′–8″	53′–9″	53′–10″	53′–11″
0	2862.250000	2871.173611	2880.111111	2889.062500	2898.027778	2907.006944
1	2862.807319	2871.731798	2880.670166	2889.622423	2898.588569	2907.568604
2	2863.364692	2872.290039	2881.229275	2890.182400	2899.149414	2908.130317
3	2863.922119	2872.848334	2881.788439	2890.742432	2899.710314	2908.692084
4	2864.479601	2873.406684	2882.347656	2891.302517	2900.271267	2909.253906
5	2865.037137	2873.965088	2882.906928	2891.862657	2900.832275	2909.815782
6	2865.594727	2874.523546	2883.466254	2892.422852	2901.393338	2910.377713
7	2866.152371	2875.082058	2884.025635	2892.983100	2901.954454	2910.939697
8	2866.710069	2875.640625	2884.585069	2893.543403	2902.515625	2911.501736
9	2867.267822	2876.199246	2885.144558	2894.103760	2903.076850	2912.063829
10	2867.825629	2876.757921	2885.704102	2894.664171	2903.638129	2912.625977
11	2868.383491	2877.316650	2886.263699	2895.224637	2904.199463	2913.188178
12	2868.941406	2877.875434	2886.823351	2895.785156	2904.760851	2913.750434
13	2869.499376	2878.434272	2887.383057	2896.345730	2905.322293	2914.312744
14	2870.057400	2878.993164	2887.942817	2896.906359	2905.883789	2914.875109
15	2870.615479	2879.552110	2888.502631	2897.467041	2906.445340	2915.437527

16ths	54′–0″	54′–1″	54′–2″	54′–3″	54′–4″	54′–5″
0	2916.000000	2925.006944	2934.027778	2943.062500	2952.111111	2961.173611
1	2916.562527	2925.570340	2934.592041	2943.627631	2952.677110	2961.740479
2	2917.125109	2926.133789	2935.156359	2944.192817	2953.243164	2962.307400
3	2917.687744	2926.697293	2935.720730	2944.758057	2953.809272	2962.874376
4	2918.250434	2927.260851	2936.285156	2945.323351	2954.375434	2963.441406
5	2918.813178	2927.824463	2936.849637	2945.888699	2954.941650	2964.008491
6	2919.375977	2928.388129	2937.414171	2946.454102	2955.507921	2964.575629
7	2919.938829	2928.951850	2937.978760	2947.019558	2956.074246	2965.142822
8	2920.501736	2929.515625	2938.543403	2947.585069	2956.640625	2965.710069
9	2921.064697	2930.079454	2939.108100	2948.150635	2957.207058	2966.277371
10	2921.627713	2930.643338	2939.672852	2948.716254	2957.773546	2966.844727
11	2922.190782	2931.207275	2940.237657	2949.281928	2958.340088	2967.412137
12	2922.753906	2931.771267	2940.802517	2949.847656	2958.906684	2967.979601
13	2923.317084	2932.335314	2941.367432	2950.413439	2959.473334	2968.547119
14	2923.880317	2932.899414	2941.932400	2950.979275	2960.040039	2969.114692
15	2924.443604	2933.463569	2942.497423	2951.545166	2960.606798	2969.682319

16ths	54′–6″	54′–7″	54′–8″	54′–9″	54′–10″	54′–11″
0	2970.250000	2979.340278	2988.444444	2997.562500	3006.694444	3015.840278
1	2970.817735	2979.908881	2989.013916	2998.132840	3007.265652	3016.412354
2	2971.385525	2980.477539	2989.583442	2998.703234	3007.836914	3016.984484
3	2971.953369	2981.046251	2990.153022	2999.273682	3008.408230	3017.556668
4	2972.521267	2981.615017	2990.722656	2999.844184	3008.979601	3018.128906
5	2973.089220	2982.183838	2991.292345	3000.414741	3009.551025	3018.701199
6	2973.657227	2982.752713	2991.862088	3000.985352	3010.122504	3019.273546
7	2974.225288	2983.321642	2992.431885	3001.556017	3010.694038	3019.845947
8	2974.793403	2983.890625	2993.001736	3002.126736	3011.265625	3020.418403
9	2975.361572	2984.459663	2993.571642	3002.697510	3011.837267	3020.990913
10	2975.929796	2985.028754	2994.141602	3003.268338	3012.408963	3021.563477
11	2976.498074	2985.597900	2994.711616	3003.839220	3012.980713	3022.136095
12	2977.066406	2986.167101	2995.281684	3004.410156	3013.552517	3022.708767
13	2977.634793	2986.736355	2995.851807	3004.981147	3014.124376	3023.281494
14	2978.203234	2987.305664	2996.421984	3005.552192	3014.696289	3023.854275
15	2978.771729	2987.875027	2996.992215	3006.123291	3015.268256	3024.427110

16ths	55′–0″	55′–1″	55′–2″	55′–3″	55′–4″	55′–5″
0	3025.000000	3034.173611	3043.361111	3052.562500	3061.777778	3071.006944
1	3025.572944	3034.747423	3043.935791	3053.138048	3062.354194	3071.584229
2	3026.145942	3035.321289	3044.510525	3053.713650	3062.930664	3072.161567
3	3026.718994	3035.895209	3045.085314	3054.289307	3063.507189	3072.738959
4	3027.292101	3036.469184	3045.660156	3054.865017	3064.083767	3073.316406
5	3027.865262	3037.043213	3046.235053	3055.440782	3064.660400	3073.893907
6	3028.438477	3037.617296	3046.810004	3056.016602	3065.237088	3074.471463
7	3029.011746	3038.191433	3047.385010	3056.592475	3065.813829	3075.049072
8	3029.585069	3038.765625	3047.960069	3057.168403	3066.390625	3075.626736
9	3030.158447	3039.339871	3048.535183	3057.744385	3066.967475	3076.204454
10	3030.731879	3039.914171	3049.110352	3058.320421	3067.544379	3076.782227
11	3031.305366	3040.488525	3049.685574	3058.896512	3068.121338	3077.360053
12	3031.878906	3041.062934	3050.260851	3059.472656	3068.698351	3077.937934
13	3032.452501	3041.637397	3050.836182	3060.048855	3069.275418	3078.515869
14	3033.026150	3042.211914	3051.411567	3060.625109	3069.852539	3079.093859
15	3033.599854	3042.786485	3051.987006	3061.201416	3070.429715	3079.671902

16ths	55′–6″	55′–7″	55′–8″	55′–9″	55′–10″	55′–11″
0	3080.250000	3089.506944	3098.777778	3108.062500	3117.361111	3126.673611
1	3080.828152	3090.085965	3099.357666	3108.643256	3117.942735	3127.256104
2	3081.406359	3090.665039	3099.937609	3109.224067	3118.524414	3127.838650
3	3081.984619	3091.244168	3100.517605	3109.804932	3119.106147	3128.421251
4	3082.562934	3091.823351	3101.097656	3110.385851	3119.687934	3129.003906
5	3083.141303	3092.402588	3101.677762	3110.966824	3120.269775	3129.586616
6	3083.719727	3092.981879	3102.257921	3111.547852	3120.851671	3130.169379
7	3084.298204	3093.561225	3102.838135	3112.128933	3121.433621	3130.752197
8	3084.876736	3094.140625	3103.418403	3112.710069	3122.015625	3131.335069
9	3085.455322	3094.720079	3103.998725	3113.291260	3122.597683	3131.917996
10	3086.033963	3095.299588	3104.579102	3113.872504	3123.179796	3132.500977
11	3086.612657	3095.879150	3105.159532	3114.453803	3123.761963	3133.084012
12	3087.191406	3096.458767	3105.740017	3115.035156	3124.344184	3133.667101
13	3087.770209	3097.038439	3106.320557	3115.616564	3124.926459	3134.250244
14	3088.349067	3097.618164	3106.901150	3116.198025	3125.508789	3134.833442
15	3088.927979	3098.197944	3107.481798	3116.779541	3126.091173	3135.416694

16ths	56′–0″	56′–1″	56′–2″	56′–3″	56′–4″	56′–5″
0	3136.000000	3145.340278	3154.694444	3164.062500	3173.444444	3182.840278
1	3136.583360	3145.924506	3155.279541	3164.648465	3174.031277	3183.427979
2	3137.166775	3146.508789	3155.864692	3165.234484	3174.618164	3184.015734
3	3137.750244	3147.093126	3156.449897	3165.820557	3175.205105	3184.603543
4	3138.333767	3147.677517	3157.035156	3166.406684	3175.792101	3185.191406
5	3138.917345	3148.261963	3157.620470	3166.992866	3176.379150	3185.779324
6	3139.500977	3148.846463	3158.205838	3167.579102	3176.966254	3186.367296
7	3140.084663	3149.431017	3158.791260	3168.165392	3177.553413	3186.955322
8	3140.668403	3150.015625	3159.376736	3168.751736	3178.140625	3187.543403
9	3141.252197	3150.600288	3159.962267	3169.338135	3178.727892	3188.131538
10	3141.836046	3151.185004	3160.547852	3169.924588	3179.315213	3188.719727
11	3142.419949	3151.769775	3161.133491	3170.511095	3179.902588	3189.307970
12	3143.003906	3152.354601	3161.719184	3171.097656	3180.490017	3189.896267
13	3143.587918	3152.939480	3162.304932	3171.684272	3181.077501	3190.484619
14	3144.171984	3153.524414	3162.890734	3172.270942	3181.665039	3191.073025
15	3144.756104	3154.109402	3163.476590	3172.857666	3182.252631	3191.661485

16ths	56′–6″	56′–7″	56′–8″	56′–9″	56′–10″	56′–11″
0	3192.250000	3201.673611	3211.111111	3220.562500	3230.027778	3239.506944
1	3192.838569	3202.263048	3211.701416	3221.153673	3230.619819	3240.099854
2	3193.427192	3202.852539	3212.291775	3221.744900	3231.211914	3240.692817
3	3194.015869	3203.442084	3212.882189	3222.336182	3231.804064	3241.285834
4	3194.604601	3204.031684	3213.472656	3222.927517	3232.396267	3241.878906
5	3195.193387	3204.621338	3214.063178	3223.518907	3232.988525	3242.472032
6	3195.782227	3205.211046	3214.653754	3224.110352	3233.580838	3243.065213
7	3196.371121	3205.800808	3215.244385	3224.701850	3234.173204	3243.658447
8	3196.960069	3206.390625	3215.835069	3225.293403	3234.765625	3244.251736
9	3197.549072	3206.980496	3216.425808	3225.885010	3235.358100	3244.845079
10	3198.138129	3207.570421	3217.016602	3226.476671	3235.950629	3245.438477
11	3198.727241	3208.160400	3217.607449	3227.068387	3236.543213	3246.031928
12	3199.316406	3208.750434	3218.198351	3227.660156	3237.135851	3246.625434
13	3199.905626	3209.340522	3218.789307	3228.251980	3237.728543	3247.218994
14	3200.494900	3209.930664	3219.380317	3228.843859	3238.321289	3247.812609
15	3201.084229	3210.520860	3219.971381	3229.435791	3238.914090	3248.406277

16ths	57′–0″	57′–1″	57′–2″	57′–3″	57′–4″	57′–5″
0	3249.000000	3258.506944	3268.027778	3277.562500	3287.111111	3296.673611
1	3249.593777	3259.101590	3268.623291	3278.158881	3287.708360	3297.271729
2	3250.187609	3259.696289	3269.218859	3278.755317	3288.305664	3297.869900
3	3250.781494	3260.291043	3269.814480	3279.351807	3288.903022	3298.468126
4	3251.375434	3260.885851	3270.410156	3279.948351	3289.500434	3299.066406
5	3251.969428	3261.480713	3271.005887	3280.544949	3290.097900	3299.664741
6	3252.563477	3262.075629	3271.601671	3281.141602	3290.695421	3300.263129
7	3253.157579	3262.670600	3272.197510	3281.738308	3291.292996	3300.861572
8	3253.751736	3263.265625	3272.793403	3282.335069	3291.890625	3301.460069
9	3254.345947	3263.860704	3273.389350	3282.931885	3292.488308	3302.058621
10	3254.940213	3264.455838	3273.985352	3283.528754	3293.086046	3302.657227
11	3255.534532	3265.051025	3274.581407	3284.125678	3293.683838	3303.255887
12	3256.128906	3265.646267	3275.177517	3284.722656	3294.281684	3303.854601
13	3256.723334	3266.241564	3275.773682	3285.319689	3294.879584	3304.453369
14	3257.317817	3266.836914	3276.369900	3285.916775	3295.477539	3305.052192
15	3257.912354	3267.432319	3276.966173	3286.513916	3296.075548	3305.651069

16ths	57′–6″	57′–7″	57′–8″	57′–9″	57′–10″	57′–11″
0	3306.250000	3315.840278	3325.444444	3335.062500	3344.694444	3354.340278
1	3306.848985	3316.440131	3326.045166	3335.664090	3345.296902	3354.943604
2	3307.448025	3317.040039	3326.645942	3336.265734	3345.899414	3355.546984
3	3308.047119	3317.640001	3327.246772	3336.867432	3346.501980	3356.150418
4	3308.646267	3318.240017	3327.847656	3337.469184	3347.104601	3356.753906
5	3309.245470	3318.840088	3328.448595	3338.070991	3347.707275	3357.357449
6	3309.844727	3319.440213	3329.049588	3338.672852	3348.310004	3357.961046
7	3310.444038	3320.040392	3329.650635	3339.274767	3348.912788	3358.564697
8	3311.043403	3320.640625	3330.251736	3339.876736	3349.515625	3359.168403
9	3311.642822	3321.240913	3330.852892	3340.478760	3350.118517	3359.772163
10	3312.242296	3321.841254	3331.454102	3341.080838	3350.721463	3360.375977
11	3312.841824	3322.441650	3332.055366	3341.682970	3351.324463	3360.979845
12	3313.441406	3323.042101	3332.656684	3342.285156	3351.927517	3361.583767
13	3314.041043	3323.642605	3333.258057	3342.887397	3352.530626	3362.187744
14	3314.640734	3324.243164	3333.859484	3343.489692	3353.133789	3362.791775
15	3315.240479	3324.843777	3334.460965	3344.092041	3353.737006	3363.395860

16ths	58′–0″	58′–1″	58′–2″	58′–3″	58′–4″	58′–5″
0	3364.000000	3373.673611	3383.361111	3393.062500	3402.777778	3412.506944
1	3364.604194	3374.278673	3383.967041	3393.669298	3403.385444	3413.115479
2	3365.208442	3374.883789	3384.573025	3394.276150	3403.993164	3413.724067
3	3365.812744	3375.488959	3385.179064	3394.883057	3404.600939	3414.332709
4	3366.417101	3376.094184	3385.785156	3395.490017	3405.208767	3414.941406
5	3367.021512	3376.699463	3386.391303	3396.097032	3405.816650	3415.550157
6	3367.625977	3377.304796	3386.997504	3396.704102	3406.424588	3416.158963
7	3368.230496	3377.910183	3387.603760	3397.311225	3407.032579	3416.767822
8	3368.835069	3378.515625	3388.210069	3397.918403	3407.640625	3417.376736
9	3369.439697	3379.121121	3388.816433	3398.525635	3408.248725	3417.985704
10	3370.044379	3379.726671	3389.422852	3399.132921	3408.856879	3418.594727
11	3370.649116	3380.332275	3390.029324	3399.740262	3409.465088	3419.203803
12	3371.253906	3380.937934	3390.635851	3400.347656	3410.073351	3419.812934
13	3371.858751	3381.543647	3391.242432	3400.955105	3410.681668	3420.422119
14	3372.463650	3382.149414	3391.849067	3401.562609	3411.290039	3421.031359
15	3373.068604	3382.755235	3392.455756	3402.170166	3411.898465	3421.640652

16ths	58′–6″	58′–7″	58′–8″	58′–9″	58′–10″	58′–11″
0	3422.250000	3432.006944	3441.777778	3451.562500	3461.361111	3471.173611
1	3422.859402	3432.617215	3442.388916	3452.174506	3461.973985	3471.787354
2	3423.468859	3433.227539	3443.000109	3452.786567	3462.586914	3472.401150
3	3424.078369	3433.837918	3443.611355	3453.398682	3463.199897	3473.015001
4	3424.687934	3434.448351	3444.222656	3454.010851	3463.812934	3473.628906
5	3425.297553	3435.058838	3444.834012	3454.623074	3464.426025	3474.242866
6	3425.907227	3435.669379	3445.445421	3455.235352	3465.039171	3474.856879
7	3426.516954	3436.279975	3446.056885	3455.847683	3465.652371	3475.470947
8	3427.126736	3436.890625	3446.668403	3456.460069	3466.265625	3476.085069
9	3427.736572	3437.501329	3447.279975	3457.072510	3466.878933	3476.699246
10	3428.346463	3438.112088	3447.891602	3457.685004	3467.492296	3477.313477
11	3428.956407	3438.722900	3448.503282	3458.297553	3468.105713	3477.927762
12	3429.566406	3439.333767	3449.115017	3458.910156	3468.719184	3478.542101
13	3430.176459	3439.944689	3449.726807	3459.522814	3469.332709	3479.156494
14	3430.786567	3440.555664	3450.338650	3460.135525	3469.946289	3479.770942
15	3431.396729	3441.166694	3450.950548	3460.748291	3470.559923	3480.385444

16ths	59′–0″	59′–1″	59′–2″	59′–3″	59′–4″	59′–5″
0	3481.000000	3490.840278	3500.694444	3510.562500	3520.444444	3530.340278
1	3481.614610	3491.455756	3501.310791	3511.179715	3521.062527	3530.959229
2	3482.229275	3492.071289	3501.927192	3511.796984	3521.680664	3531.578234
3	3482.843994	3492.686876	3502.543647	3512.414307	3522.298855	3532.197293
4	3483.458767	3493.302517	3503.160156	3513.031684	3522.917101	3532.816406
5	3484.073595	3493.918213	3503.776720	3513.649116	3523.535400	3533.435574
6	3484.688477	3494.533963	3504.393338	3514.266602	3524.153754	3534.054796
7	3485.303413	3495.149767	3505.010010	3514.884142	3524.772163	3534.674072
8	3485.918403	3495.765625	3505.626736	3515.501736	3525.390625	3535.293403
9	3486.533447	3496.381538	3506.243517	3516.119385	3526.009142	3535.912788
10	3487.148546	3496.997504	3506.860352	3516.737088	3526.627713	3536.532227
11	3487.763699	3497.613525	3507.477241	3517.354845	3527.246338	3537.151720
12	3488.378906	3498.229601	3508.094184	3517.972656	3527.865017	3537.771267
13	3488.994168	3498.845730	3508.711182	3518.590522	3528.483751	3538.390869
14	3489.609484	3499.461914	3509.328234	3519.208442	3529.102539	3539.010525
15	3490.224854	3500.078152	3509.945340	3519.826416	3529.721381	3539.630235

16ths	59′–6″	59′–7″	59′–8″	59′–9″	59′–10″	59′–11″
0	3540.250000	3550.173611	3560.111111	3570.062500	3580.027778	3590.006944
1	3540.869819	3550.794298	3560.732666	3570.684923	3580.651069	3590.631104
2	3541.489692	3551.415039	3561.354275	3571.307400	3581.274414	3591.255317
3	3542.109619	3552.035834	3561.975939	3571.929932	3581.897814	3591.879584
4	3542.729601	3552.656684	3562.597656	3572.552517	3582.521267	3592.503906
5	3543.349637	3553.277588	3563.219428	3573.175157	3583.144775	3593.128282
6	3543.969727	3553.898546	3563.841254	3573.797852	3583.768338	3593.752713
7	3544.589871	3554.519558	3564.463135	3574.420600	3584.391954	3594.377197
8	3545.210069	3555.140625	3565.085069	3575.043403	3585.015625	3595.001736
9	3545.830322	3555.761746	3565.707058	3575.666260	3585.639350	3595.626329
10	3546.450629	3556.382921	3566.329102	3576.289171	3586.263129	3596.250977
11	3547.070991	3557.004150	3566.951199	3576.912137	3586.886963	3596.875678
12	3547.691406	3557.625434	3567.573351	3577.535156	3587.510851	3597.500434
13	3548.311876	3558.246772	3568.195557	3578.158230	3588.134793	3598.125244
14	3548.932400	3558.868164	3568.817817	3578.781359	3588.758789	3598.750109
15	3549.552979	3559.489610	3569.440131	3579.404541	3589.382840	3599.375027

16ths	60′–0″	60′–1″	60′–2″	60′–3″	60′–4″	60′–5″
0	3600.000000	3610.006944	3620.027778	3630.062500	3640.111111	3650.173611
1	3600.625027	3610.632840	3620.654541	3630.690131	3640.739610	3650.802979
2	3601.250109	3611.258789	3621.281359	3631.317817	3641.368164	3651.432400
3	3601.875244	3611.884793	3621.908230	3631.945557	3641.996772	3652.061876
4	3602.500434	3612.510851	3622.535156	3632.573351	3642.625434	3652.691406
5	3603.125678	3613.136963	3623.162137	3633.201199	3643.254150	3653.320991
6	3603.750977	3613.763129	3623.789171	3633.829102	3643.882921	3653.950629
7	3604.376329	3614.389350	3624.416260	3634.457058	3644.511746	3654.580322
8	3605.001736	3615.015625	3625.043403	3635.085069	3645.140625	3655.210069
9	3605.627197	3615.641954	3625.670600	3635.713135	3645.769558	3655.839871
10	3606.252713	3616.268338	3626.297852	3636.341254	3646.398546	3656.469727
11	3606.878282	3616.894775	3626.925157	3636.969428	3647.027588	3657.099637
12	3607.503906	3617.521267	3627.552517	3637.597656	3647.656684	3657.729601
13	3608.129584	3618.147814	3628.179932	3638.225939	3648.285834	3658.359619
14	3608.755317	3618.774414	3628.807400	3638.854275	3648.915039	3658.989692
15	3609.381104	3619.401069	3629.434923	3639.482666	3649.544298	3659.619819

16ths	60′–6″	60′–7″	60′–8″	60′–9″	60′–10″	60′–11″
0	3660.250000	3670.340278	3680.444444	3690.562500	3700.694444	3710.840278
1	3660.880235	3670.971381	3681.076416	3691.195340	3701.328152	3711.474854
2	3661.510525	3671.602539	3681.708442	3691.828234	3701.961914	3712.109484
3	3662.140869	3672.233751	3682.340522	3692.461182	3702.595730	3712.744168
4	3662.771267	3672.865017	3682.972656	3693.094184	3703.229601	3713.378906
5	3663.401720	3673.496338	3683.604845	3693.727241	3703.863525	3714.013699
6	3664.032227	3674.127713	3684.237088	3694.360352	3704.497504	3714.648546
7	3664.662788	3674.759142	3684.869385	3694.993517	3705.131538	3715.283447
8	3665.293403	3675.390625	3685.501736	3695.626736	3705.765625	3715.918403
9	3665.924072	3676.022163	3686.134142	3696.260010	3706.399767	3716.553413
10	3666.554796	3676.653754	3686.766602	3696.893338	3707.033963	3717.188477
11	3667.185574	3677.285400	3687.399116	3697.526720	3707.668213	3717.823595
12	3667.816406	3677.917101	3688.031684	3698.160156	3708.302517	3718.458767
13	3668.447293	3678.548855	3688.664307	3698.793647	3708.936876	3719.093994
14	3669.078234	3679.180664	3689.296984	3699.427192	3709.571289	3719.729275
15	3669.709229	3679.812527	3689.929715	3700.060791	3710.205756	3720.364610

16ths	61′–0″	61′–1″	61′–2″	61′–3″	61′–4″	61′–5″
0	3721.000000	3731.173611	3741.361111	3751.562500	3761.777778	3772.006944
1	3721.635444	3731.809923	3741.998291	3752.200548	3762.416694	3772.646729
2	3722.270942	3732.446289	3742.635525	3752.838650	3763.055664	3773.286567
3	3722.906494	3733.082709	3743.272814	3753.476807	3763.694689	3773.926459
4	3723.542101	3733.719184	3743.910156	3754.115017	3764.333767	3774.566406
5	3724.177762	3734.355713	3744.547553	3754.753282	3764.972900	3775.206407
6	3724.813477	3734.992296	3745.185004	3755.391602	3765.612088	3775.846463
7	3725.449246	3735.628933	3745.822510	3756.029975	3766.251329	3776.486572
8	3726.085069	3736.265625	3746.460069	3756.668403	3766.890625	3777.126736
9	3726.720947	3736.902371	3747.097683	3757.306885	3767.529975	3777.766954
10	3727.356879	3737.539171	3747.735352	3757.945421	3768.169379	3778.407227
11	3727.992866	3738.176025	3748.373074	3758.584012	3768.808838	3779.047553
12	3728.628906	3738.812934	3749.010851	3759.222656	3769.448351	3779.687934
13	3729.265001	3739.449897	3749.648682	3759.861355	3770.087918	3780.328369
14	3729.901150	3740.086914	3750.286567	3760.500109	3770.727539	3780.968859
15	3730.537354	3740.723985	3750.924506	3761.138916	3771.367215	3781.609402

16ths	61′–6″	61′–7″	61′–8″	61′–9″	61′–10″	61′–11″
0	3782.250000	3792.506944	3802.777778	3813.062500	3823.361111	3833.673611
1	3782.890652	3793.148465	3803.420166	3813.705756	3824.005235	3834.318604
2	3783.531359	3793.790039	3804.062609	3814.349067	3824.649414	3834.963650
3	3784.172119	3794.431668	3804.705105	3814.992432	3825.293647	3835.608751
4	3784.812934	3795.073351	3805.347656	3815.635851	3825.937934	3836.253906
5	3785.453803	3795.715088	3805.990262	3816.279324	3826.582275	3836.899116
6	3786.094727	3796.356879	3806.632921	3816.922852	3827.226671	3837.544379
7	3786.735704	3796.998725	3807.275635	3817.566433	3827.871121	3838.189697
8	3787.376736	3797.640625	3807 918403	3818.210069	3828.515625	3838.835069
9	3788.017822	3798.282579	3808.561225	3818.853760	3829.160183	3839.480496
10	3788.658963	3798.924588	3809.204102	3819.497504	3829.804796	3840.125977
11	3789.300157	3799.566650	3809.847032	3820.141303	3830.449463	3840.771512
12	3789.941406	3800.208767	3810.490017	3820.785156	3831.094184	3841.417101
13	3790.582709	3800.850939	3811.133057	3821.429064	3831.738959	3842.062744
14	3791.224067	3801.493164	3811.776150	3822.073025	3832.383789	3842.708442
15	3791.865479	3802.135444	3812.419298	3822.717041	3833.028673	3843.354194

16ths	62′–0″	62′–1″	62′–2″	62′–3″	62′–4″	62′–5″
0	3844.000000	3854.340278	3864.694444	3875.062500	3885.444444	3895.840278
1	3844.645860	3854.987006	3865.342041	3875.710965	3886.093777	3896.490479
2	3845.291775	3855.633789	3865.989692	3876.359484	3886.743164	3897.140734
3	3845.937744	3856.280626	3866.637397	3877.008057	3887.392605	3897.791043
4	3846.583767	3856.927517	3867.285156	3877.656684	3888.042101	3898.441406
5	3847.229845	3857.574463	3867.932970	3878.305366	3888.691650	3899.091824
6	3847.875977	3858.221463	3868.580838	3878.954102	3889.341254	3899.742296
7	3848.522163	3858.868517	3869.228760	3879.602892	3889.990913	3900.392822
8	3849.168403	3859.515625	3869.876736	3880.251736	3890.640625	3901.043403
9	3849.814697	3860.162788	3870.524767	3880.900635	3891.290392	3901.694038
10	3850.461046	3860.810004	3871.172852	3881.549588	3891.940213	3902.344727
11	3851.107449	3861.457275	3871.820991	3882.198595	3892.590088	3902.995470
12	3851.753906	3862.104601	3872.469184	3882.847656	3893.240017	3903.646267
13	3852.400418	3862.751980	3873.117432	3883.496772	3893.890001	3904.297119
14	3853.046984	3863.399414	3873.765734	3884.145942	3894.540039	3904.948025
15	3853.693604	3864.046902	3874.414090	3884.795166	3895.190131	3905.598985

16ths	62′–6″	62′–7″	62′–8″	62′–9″	62′–10″	62′–11″
0	3906.250000	3916.673611	3927.111111	3937.562500	3948.027778	3958.506944
1	3906.901069	3917.325548	3927.763916	3938.216173	3948.682319	3959.162354
2	3907.552192	3917.977539	3928.416775	3938.869900	3949.336914	3959.817817
3	3908.203369	3918.629584	3929.069689	3939.523682	3949.991564	3960.473334
4	3908.854601	3919.281684	3929.722656	3940.177517	3950.646267	3961.128906
5	3909.505887	3919.933838	3930.375678	3940.831407	3951.301025	3961.784532
6	3910.157227	3920.586046	3931.028754	3941.485352	3951.955838	3962.440213
7	3910.808621	3921.238308	3931.681885	3942.139350	3952.610704	3963.095947
8	3911.460069	3921.890625	3932.335069	3942.793403	3953.265625	3963.751736
9	3912.111572	3922.542996	3932.988308	3943.447510	3953.920600	3964.407579
10	3912.763129	3923.195421	3933.641602	3944.101671	3954.575629	3965.063477
11	3913.414741	3923.847900	3934.294949	3944.755887	3955.230713	3965.719428
12	3914.066406	3924.500434	3934.948351	3945.410156	3955.885851	3966.375434
13	3914.718126	3925.153022	3935.601807	3946.064480	3956.541043	3967.031494
14	3915.369900	3925.805664	3936.255317	3946.718859	3957.196289	3967.687609
15	3916.021729	3926.458360	3936.908881	3947.373291	3957.851590	3968.343777

16ths	63′–0″	63′–1″	63′–2″	63′–3″	63′–4″	63′–5″
0	3969.000000	3979.506944	3990.027778	4000.562500	4011.111111	4021.673611
1	3969.656277	3980.164090	3990.685791	4001.221381	4011.770860	4022.334229
2	3970.312609	3980.821289	3991.343859	4001.880317	4012.430664	4022.994900
3	3970.968994	3981.478543	3992.001980	4002.539307	4013.090522	4023.655626
4	3971.625434	3982.135851	3992.660156	4003.198351	4013.750434	4024.316406
5	3972.281928	3982.793213	3993.318387	4003.857449	4014.410400	4024.977241
6	3972.938477	3983.450629	3993.976671	4004.516602	4015.070421	4025.638129
7	3973.595079	3984.108100	3994.635010	4005.175808	4015.730496	4026.299072
8	3974.251736	3984.765625	3995.293403	4005.835069	4016.390625	4026.960069
9	3974.908447	3985.423204	3995.951850	4006.494385	4017.050808	4027.621121
10	3975.565213	3986.080838	3996.610352	4007.153754	4017.711046	4028 282227
11	3976.222032	3986.738525	3997.268907	4007.813178	4018.371338	4028.943387
12	3976.878906	3987.396267	3997.927517	4008.472656	4019.031684	4029.604601
13	3977.535834	3988.054064	3998.586182	4009.132189	4019.692084	4030.265869
14	3978.192817	3988.711914	3999.244900	4009.791775	4020.352539	4030.927192
15	3978.849854	3989.369819	3999.903673	4010.451416	4021.013048	4031.588569

16ths	63′–6″	63′–7″	63′–8″	63′–9″	63′–10″	63′–11″
0	4032.250000	4042.840278	4053.444444	4064.062500	4074.694444	4085.340278
1	4032.911485	4043.502631	4054.107666	4064.726590	4075.359402	4086.006104
2	4033.573025	4044.165039	4054.770942	4065.390734	4076.024414	4086.671984
3	4034.234619	4044.827501	4055.434272	4066.054932	4076.689480	4087.337918
4	4034.896267	4045.490017	4056.097656	4066.719184	4077.354601	4088.003906
5	4035.557970	4046.152588	4056.761095	4067.383491	4078.019775	4088.669949
6	4036.219727	4046.815213	4057.424588	4068.047852	4078.685004	4089.336046
7	4036.881538	4047.477892	4058.088135	4068.712267	4079.350288	4090.002197
8	4037.543403	4048.140625	4058.751736	4069.376736	4080.015625	4090.668403
9	4038.205322	4048.803413	4059.415392	4070.041260	4080.681017	4091.334663
10	4038.867296	4049.466254	4060.079102	4070.705838	4081.346463	4092.000977
11	4039.529324	4050.129150	4060.742866	4071.370470	4082.011963	4092.667345
12	4040.191406	4050.792101	4061.406684	4072.035156	4082.677517	4093.333767
13	4040.853543	4051.455105	4062.070557	4072.699897	4083.343126	4094.000244
14	4041.515734	4052.118164	4062.734484	4073.364692	4084.008789	4094.666775
15	4042.177979	4052.781277	4063.398465	4074.029541	4084.674506	4095.333360

16ths	64′–0″	64′–1″	64′–2″	64′–3″	64′–4″	64′–5″
0	4096.000000	4106.673611	4117.361111	4128.062500	4138.777778	4149.506944
1	4096.666694	4107.341173	4118.029541	4128.731798	4139.447944	4150.177979
2	4097.333442	4108.008789	4118.698025	4129.401150	4140.118164	4150.849067
3	4098.000244	4108.676459	4119.366564	4130.070557	4140.788439	4151.520209
4	4098.667101	4109.344184	4120.035156	4130.740017	4141.458767	4152.191406
5	4099.334012	4110.011963	4120.703803	4131.409532	4142.129150	4152.862657
6	4100.000977	4110.679796	4121.372504	4132.079102	4142.799588	4153.533963
7	4100.667996	4111.347683	4122.041260	4132.748725	4143.470079	4154.205322
8	4101.335069	4112.015625	4122.710069	4133.418403	4144.140625	4154.876736
9	4102.002197	4112.683621	4123.378933	4134.088135	4144.811225	4155.548204
10	4102.669379	4113.351671	4124.047852	4134.757921	4145.481879	4156.219727
11	4103.336616	4114.019775	4124.716824	4135.427762	4146.152588	4156.891303
12	4104.003906	4114.687934	4125.385851	4136.097656	4146.823351	4157.562934
13	4104.671251	4115.356147	4126.054932	4136.767605	4147.494168	4158.234619
14	4105.338650	4116.024414	4126.724067	4137.437609	4148.165039	4158.906359
15	4106.006104	4116.692735	4127.393256	4138.107666	4148.835965	4159.578152

16ths	64′–6″	64′–7″	64′–8″	64′–9″	64′–10″	64′–11″
0	4160.250000	4171.006944	4181.777778	4192.562500	4203.361111	4214.173611
1	4160.921902	4171.679715	4182.451416	4193.237006	4204.036485	4214.849854
2	4161.593859	4172.352539	4183.125109	4193.911567	4204.711914	4215.526150
3	4162.265869	4173.025418	4183.798855	4194.586182	4205.387397	4216.202501
4	4162.937934	4173.698351	4184.472656	4195.260851	4206.062934	4216.878906
5	4163.610053	4174.371338	4185.146512	4195.935574	4206.738525	4217.555366
6	4164.282227	4175.044379	4185.820421	4196.610352	4207.414171	4218.231879
7	4164.954454	4175.717475	4186.494385	4197.285183	4208.089871	4218.908447
8	4165.626736	4176.390625	4187.168403	4197.960069	4208.765625	4219.585069
9	4166.299072	4177.063829	4187.842475	4198.635010	4209.441433	4220.261746
10	4166.971463	4177.737088	4188.516602	4199.310004	4210.117296	4220.938477
11	4167.643907	4178.410400	4189.190782	4199.985053	4210.793213	4221.615262
12	4168.316406	4179.083767	4189.865017	4200.660156	4211.469184	4222.292101
13	4168.988959	4179.757189	4190.539307	4201.335314	4212.145209	4222.968994
14	4169.661567	4180.430664	4191.213650	4202.010525	4212.821289	4223.645942
15	4170.334229	4181.104194	4191.888048	4202.685791	4213.497423	4224.322944

16ths	65′–0″	65′–1″	65′–2″	65′–3″	65′–4″	65′–5″
0	4225.000000	4235.840278	4246.694444	4257.562500	4268.444444	4279.340278
1	4225.677110	4236.518256	4247.373291	4258.242215	4269.125027	4280.021729
2	4226.354275	4237.196289	4248.052192	4258.921984	4269.805664	4280.703234
3	4227.031494	4237.874376	4248.731147	4259.601807	4270.486355	4281.384793
4	4227.708767	4238.552517	4249.410156	4260 281684	4271.167101	4282.066406
5	4228.386095	4239.230713	4250.089220	4260.961616	4271.847900	4282.748074
6	4229.063477	4239.908963	4250.768338	4261.641602	4272.528754	4283.429796
7	4229.740913	4240.587267	4251.447510	4262.321642	4273.209663	4284.111572
8	4230.418403	4241.265625	4252.126736	4263.001736	4273.890625	4284.793403
9	4231.095947	4241.944038	4252.806017	4263.681885	4274.571642	4285.475288
10	4231.773546	4242.622504	4253.485352	4264.362088	4275.252713	4286.157227
11	4232.451199	4243.301025	4254.164741	4265.042345	4275.933838	4286.839220
12	4233.128906	4243.979601	4254.844184	4265.722656	4276.615017	4287.521267
13	4233.806668	4244.658230	4255.523682	4266.403022	4277.296251	4288.203369
14	4234.484484	4245.336914	4256.203234	4267.083442	4277.977539	4288.885525
15	4235.162354	4246.015652	4256.882840	4267.763916	4278.658881	4289.567735

16ths	65′–6″	65′–7″	65′–8″	65′–9″	65′–10″	65′–11″
0	4290.250000	4301.173611	4312.111111	4323.062500	4334.027778	4345.006944
1	4290.932319	4301.856798	4312.795166	4323.747423	4334.713569	4345.693604
2	4291.614692	4302.540039	4313.479275	4324.432400	4335.399414	4346.380317
3	4292.297119	4303.223334	4314.163439	4325.117432	4336.085314	4347.067084
4	4292.979601	4303.906684	4314.847656	4325.802517	4336.771267	4347.753906
5	4293.662137	4304.590088	4315.531928	4326.487657	4337.457275	4348.440782
6	4294.344727	4305.273546	4316.216254	4327.172852	4338.143338	4349.127713
7	4295.027371	4305.957058	4316.900635	4327.858100	4338.829454	4349.814697
8	4295.710069	4306.640625	4317.585069	4328.543403	4339.515625	4350.501736
9	4296.392822	4307.324246	4318.269558	4329.228760	4340.201850	4351.188829
10	4297.075629	4308.007921	4318.954102	4329.914171	4340.888129	4351.875977
11	4297.758491	4308.691650	4319.638699	4330.599637	4341.574463	4352.563178
12	4298.441406	4309.375434	4320.323351	4331.285156	4342.260851	4353.250434
13	4299.124376	4310.059272	4321.008057	4331.970730	4342.947293	4353.937744
14	4299.807400	4310.743164	4321.692817	4332.656359	4343.633789	4354.625109
15	4300.490479	4311.427110	4322.377631	4333.342041	4344.320340	4355.312527

16ths	66′–0″	66′–1″	66′–2″	66′–3″	66′–4″	66′–5″
0	4356.000000	4367.006944	4378.027778	4389.062500	4400.111111	4411.173611
1	4356.687527	4367.695340	4378.717041	4389.752631	4400.802110	4411.865479
2	4357.375109	4368.383789	4379.406359	4390.442817	4401.493164	4412.557400
3	4358 062744	4369.072293	4380 095730	4391.133057	4402.184272	4413.249376
4	4358.750434	4369.760851	4380.785156	4391.823351	4402.875434	4413.941406
5	4359.438178	4370.449463	4381.474637	4392.513699	4403.566650	4414.633491
6	4360.125977	4371.138129	4382.164171	4393.204102	4404.257921	4415.325629
7	4360.813829	4371.826850	4382.853760	4393.894558	4404.949246	4416.017822
8	4361.501736	4372.515625	4383.543403	4394.585069	4405.640625	4416.710069
9	4362 189697	4373.204454	4384.233100	4395.275635	4406.332058	4417.402371
10	4362.877713	4373.893338	4384.922852	4395.966254	4407.023546	4418.094727
11	4363.565782	4374.582275	4385.612657	4396.656928	4407.715088	4418.787137
12	4364 253906	4375.271267	4386.302517	4397.347656	4408.406684	4419.479601
13	4364.942084	4375.960314	4386.992432	4398.038439	4409.098334	4420.172119
14	4365.630317	4376.649414	4387.682400	4398.729275	4409.790039	4420.864692
15	4366.318604	4377.338569	4388.372423	4399.420166	4410.481798	4421.557319

16ths	66′–6″	66′–7″	66′–8″	66′–9″	66′–10″	66′–11″
0	4422 250000	4433.340278	4444.444444	4455.562500	4466.694444	4477.840278
1	4422.942735	4434.033881	4445.138916	4456.257840	4467.390652	4478.537354
2	4423.635525	4434.727539	4445.833442	4456.953234	4468.086914	4479.234484
3	4424.328369	4435.421251	4446.528022	4457.648682	4468.783230	4479.931668
4	4425.021267	4436.115017	4447.222656	4458.344184	4469.479601	4480.628906
5	4425.714220	4436.808838	4447.917345	4459.039741	4470.176025	4481.326199
6	4426.407227	4437.502713	4448.612088	4459.735352	4470.872504	4482.023546
7	4427.100288	4438.196642	4449.306885	4460.431017	4471.569038	4482.720947
8	4427.793403	4438.890625	4450.001736	4461.126736	4472.265625	4483.418403
9	4428.486572	4439.584663	4450.696642	4461.822510	4472.962267	4484.115913
10	4429.179796	4440.278754	4451.391602	4462.518338	4473.658963	4484.813477
11	4429.873074	4440.972900	4452.086616	4463.214220	4474.355713	4485.511095
12	4430.566406	4441.667101	4452.781684	4463.910156	4475.052517	4486.208767
13	4431.259793	4442.361355	4453.476807	4464.606147	4475.749376	4486.906494
14	4431.953234	4443.055664	4454.171984	4465.302192	4476.446289	4487.604275
15	4432.646729	4443.750027	4454.867215	4465.998291	4477.143256	4488.302110

16ths	67′–0″	67′–1″	67′–2″	67′–3″	67′–4″	67′–5″
0	4489.000000	4500.173611	4511.361111	4522.562500	4533.777778	4545.006944
1	4489.697944	4500.872423	4512.060791	4523.263048	4534.479194	4545.709229
2	4490.395942	4501.571289	4512.760525	4523.963650	4535.180664	4546.411567
3	4491.093994	4502.270209	4513.460314	4524.664307	4535.882189	4547.113959
4	4491.792101	4502.969184	4514.160156	4525.365017	4536.583767	4547.816406
5	4492.490262	4503.668213	4514.860053	4526.065782	4537.285400	4548.518907
6	4493.188477	4504.367296	4515.560004	4526.766602	4537.987088	4549.221463
7	4493.886746	4505.066433	4516.260010	4527.467475	4538.688829	4549 924072
8	4494.585069	4505.765625	4516.960069	4528.168403	4539.390625	4550.626736
9	4495.283447	4506.464871	4517.660183	4528.869385	4540.092475	4551.329454
10	4495.981879	4507.164171	4518.360352	4529.570421	4540.794379	4552.032227
11	4496.680366	4507.863525	4519.060574	4530.271512	4541.496338	4552.735053
12	4497.378906	4508.562934	4519.760851	4530.972656	4542.198351	4553.437934
13	4498.077501	4509.262397	4520.461182	4531.673855	4542.900418	4554.140869
14	4498.776150	4509.961914	4521.161567	4532.375109	4543.602539	4554.843859
15	4499.474854	4510.661485	4521.862006	4533.076416	4544.304715	4555.546902

16ths	67′-6″	67′-7″	67′-8″	67′-9″	67′-10″	67′-11″
0	4556.250000	4567.506944	4578.777778	4590.062500	4601.361111	4612.673611
1	4556.953152	4568.210965	4579.482666	4590.768256	4602.067735	4613.381104
2	4557.656359	4568.915039	4580.187609	4591.474067	4602.774414	4614.088650
3	4558.359619	4569.619168	4580.892605	4592.179932	4603.481147	4614.796251
4	4559.062934	4570.323351	4581.597656	4592.885851	4604.187934	4615.503906
5	4559.766303	4571.027588	4582.302762	4593.591824	4604.894775	4616.211616
6	4560.469727	4571.731879	4583.007921	4594.297852	4605.601671	4616.919379
7	4561.173204	4572.436225	4583.713135	4595.003933	4606.308621	4617.627197
8	4561.876736	4573.140625	4584.418403	4595.710069	4607.015625	4618.335069
9	4562.580322	4573.845079	4585.123725	4596.416260	4607.722683	4619.042996
10	4563.283963	4574.549588	4585.829102	4597.122504	4608.429796	4619.750977
11	4563.987657	4575.254150	4586.534532	4597.828803	4609.136963	4620.459012
12	4564.691406	4575 958767	4587.240017	4598 535156	4609.844184	4621.167101
13	4565.395209	4576.663439	4587.945557	4599.241564	4610.551459	4621.875244
14	4566.099067	4577.368164	4588.651150	4599.948025	4611.258789	4622.583442
15	4566.802979	4578.072944	4589.356798	4600.654541	4611.966173	4623.291694

16ths	68′–0″	68′–1″	68′–2″	68′–3″	68′–4″	68′–5″
0	4624.000000	4635.340278	4646.694444	4658.062500	4669.444444	4680.840278
1	4624.708360	4636.049506	4647.404541	4658.773465	4670.156277	4681.552979
2	4625.416775	4636.758789	4648.114692	4659.484484	4670.868164	4682.265734
3	4626.125244	4637.468126	4648.824897	4660.195557	4671.580105	4682.978543
4	4626.833767	4638.177517	4649.535156	4660.906684	4672.292101	4683.691406
5	4627.542345	4638.886963	4650.245470	4661.617866	4673.004150	4684.404324
6	4628.250977	4639.596463	4650.955838	4662.329102	4673.716254	4685.117296
7	4628.959663	4640.306017	4651.666260	4663.040392	4674.428413	4685.830322
8	4629.668403	4641.015625	4652.376736	4663.751736	4675.140625	4686.543403
9	4630.377197	4641.725288	4653.087267	4664.463135	4675.852892	4687.256538
10	4631.086046	4642.435004	4653.797852	4665.174588	4676.565213	4687.969727
11	4631.794949	4643.144775	4654.508491	4665.886095	4677.277588	4688.682970
12	4632.503906	4643.854601	4655.219184	4666.597656	4677.990017	4689.396267
13	4633.212918	4644.564480	4655.929932	4667.309272	4678.702501	4690.109619
14	4633.921984	4645.274414	4656.640734	4668.020942	4679.415039	4690.823025
15	4634.631104	4645.984402	4657.351590	4668.732666	4680.127631	4691.536485

16ths	68′–6″	68′–7″	68′–8″	68′–9″	68′–10″	68′–11″
0	4692.250000	4703.673611	4715.111111	4726.562500	4738.027778	4749.506944
1	4692.963569	4704.388048	4715.826416	4727.278673	4738.744819	4750.224854
2	4693.677192	4705.102539	4716.541775	4727.994900	4739.461914	4750.942817
3	4694.390869	4705.817084	4717.257189	4728.711182	4740.179064	4751.660834
4	4695.104601	4706.531684	4717.972656	4729.427517	4740.896267	4752.378906
5	4695.818387	4707.246338	4718.688178	4730.143907	4741.613525	4753.097032
6	4696.532227	4707.961046	4719.403754	4730.860352	4742.330838	4753.815213
7	4697.246121	4708.675808	4720.119385	4731.576850	4743.048204	4754.533447
8	4697.960069	4709.390625	4720.835069	4732.293403	4743.765625	4755.251736
9	4698.674072	4710.105496	4721.550808	4733.010010	4744.483100	4755.970079
10	4699.388129	4710.820421	4722.266602	4733.726671	4745.200629	4756.688477
11	4700.102241	4711.535400	4722.982449	4734.443387	4745.918213	4757.406928
12	4700.816406	4712.250434	4723.698351	4735.160156	4746.635851	4758.125434
13	4701.530626	4712.965522	4724.414307	4735.876980	4747.353543	4758.843994
14	4702.244900	4713.680664	4725.130317	4736.593859	4748.071289	4759.562609
15	4702.959229	4714.395860	4725.846381	4737.310791	4748.789090	4760.281277

16ths	69′–0″	69′–1″	69′–2″	69′–3″	69′–4″	69′–5″
0	4761.000000	4772.506944	4784.027778	4795.562500	4807.111111	4818.673611
1	4761.718777	4773.226590	4784.748291	4796.283881	4807.833360	4819.396729
2	4762.437609	4773.946289	4785.468859	4797.005317	4808.555664	4820.119900
3	4763.156494	4774.666043	4786.189480	4797.726807	4809.278022	4820.843126
4	4763.875434	4775.385851	4786.910156	4798.448351	4810.000434	4821.566406
5	4764.594428	4776.105713	4787.630887	4799.169949	4810.722900	4822.289741
6	4765.313477	4776.825629	4788.351671	4799.891602	4811.445421	4823.013129
7	4766.032579	4777.545600	4789.072510	4800.613308	4812.167996	4823.736572
8	4766.751736	4778.265625	4789.793403	4801.335069	4812.890625	4824.460069
9	4767.470947	4778.985704	4790.514350	4802.056885	4813.613308	4825.183621
10	4768.190213	4779.705838	4791.235352	4802.778754	4814.336046	4825.907227
11	4768.909532	4780.426025	4791.956407	4803.500678	4815.058838	4826.630887
12	4769.628906	4781.146267	4792.677517	4804.222656	4815.781684	4827.354601
13	4770.348334	4781.866564	4793.398682	4804.944689	4816.504584	4828.078369
14	4771.067817	4782.586914	4794.119900	4805.666775	4817.227539	4828.802192
15	4771.787354	4783.307319	4794.841173	4806.388916	4817.950548	4829.526069

16ths	69′–6″	69′–7″	69′–8″	69′–9″	69′–10″	69′–11″
0	4830.250000	4841.840278	4853.444444	4865.062500	4876.694444	4888.340278
1	4830.973985	4842.565131	4854.170166	4865.789090	4877.421902	4889.068604
2	4831.698025	4843.290039	4854.895942	4866.515734	4878.149414	4889.796984
3	4832.422119	4844.015001	4855.621772	4867.242432	4878.876980	4890.525418
4	4833.146267	4844.740017	4856.347656	4867.969184	4879.604601	4891.253906
5	4833.870470	4845.465088	4857.073595	4868.695991	4880.332275	4891.982449
6	4834.594727	4846.190213	4857.799588	4869.422852	4881.060004	4892.711046
7	4835.319038	4846.915392	4858.525635	4870.149767	4881.787788	4893.439697
8	4836.043403	4847.640625	4859.251736	4870.876736	4882.515625	4894.168403
9	4836.767822	4848.365913	4859.977892	4871.603760	4883.243517	4894.897163
10	4837.492296	4849.091254	4860.704102	4872.330838	4883.971463	4895.625977
11	4838.216824	4849.816650	4861.430366	4873.057970	4884.699463	4896.354845
12	4838.941406	4850.542101	4862.156684	4873.785156	4885.427517	4897.083767
13	4839.666043	4851.267605	4862.883057	4874.512397	4886.155626	4897.812744
14	4840.390734	4851.993164	4863.609484	4875.239692	4886.883789	4898.541775
15	4841.115479	4852.718777	4864.335965	4875.967041	4887.612006	4899.270860

16ths	70′–0″	70′–1″	70′–2″	70′–3″	70′–4″	70′–5″
0	4900.000000	4911.673611	4923.361111	4935.062500	4946.777778	4958.506944
1	4900.729194	4912.403673	4924.092041	4935.794298	4947.510444	4959.240479
2	4901.458442	4913.133789	4924.823025	4936.526150	4948.243164	4959.974067
3	4902.187744	4913.863959	4925.554064	4937.258057	4948.975939	4960.707709
4	4902.917101	4914.594184	4926.285156	4937.990017	4949.708767	4961.441406
5	4903.646512	4915.324463	4927.016303	4938.722032	4950.441650	4962.175157
6	4904.375977	4916.054796	4927.747504	4939.454102	4951.174588	4962.908963
7	4905.105496	4916.785183	4928.478760	4940.186225	4951.907579	4963.642822
8	4905.835069	4917.515625	4929.210069	4940.918403	4952.640625	4964.376736
9	4906.564697	4918.246121	4929.941433	4941.650635	4953.373725	4965.110704
10	4907.294379	4918.976671	4930.672852	4942.382921	4954.106879	4965.844727
11	4908.024116	4919.707275	4931.404324	4943.115262	4954.840088	4966.578803
12	4908.753906	4920.437934	4932.135851	4943.847656	4955.573351	4967.312934
13	4909.483751	4921.168647	4932.867432	4944.580105	4956.306668	4968.047119
14	4910.213650	4921.899414	4933.599067	4945.312609	4957.040039	4968.781359
15	4910.943604	4922.630235	4934.330756	4946.045166	4957.773465	4969.515652

16ths	70′–6″	70′–7″	70′–8″	70′–9″	70′–10″	70′–11″
0	4970.250000	4982.006944	4993.777778	5005.562500	5017.361111	5029.173611
1	4970.984402	4982.742215	4994.513916	5006.299506	5018.098985	5029.912354
2	4971.718859	4983.477539	4995.250109	5007.036567	5018.836914	5030.651150
3	4972.453369	4984.212918	4995.986355	5007.773682	5019.574897	5031.390001
4	4973.187934	4984.948351	4996.722656	5008.510851	5020.312934	5032.128906
5	4973.922553	4985.683838	4997.459012	5009.248074	5021.051025	5032.867866
6	4974.657227	4986.419379	4998.195421	5009.985352	5021.789171	5033.606879
7	4975.391954	4987.154975	4998.931885	5010.722683	5022.527371	5034.345947
8	4976.126736	4987.890625	4999.668403	5011.460069	5023.265625	5035.085069
9	4976.861572	4988.626329	5000.404975	5012.197510	5024.003933	5035.824246
10	4977.596463	4989.362088	5001.141602	5012.935004	5024.742296	5036.563477
11	4978.331407	4990.097900	5001.878282	5013.672553	5025.480713	5037.302762
12	4979.066406	4990.833767	5002.615017	5014.410156	5026.219184	5038.042101
13	4979.801459	4991.569689	5003.351807	5015.147814	5026.957709	5038.781494
14	4980.536567	4992.305664	5004.088650	5015.885525	5027.696289	5039.520942
15	4981.271729	4993.041694	5004.825548	5016.623291	5028.434923	5040.260444

16ths	71′–0″	71′–1″	71′–2″	71′–3″	71′–4″	71′–5″
0	5041.000000	5052.840278	5064.694444	5076.562500	5088.444444	5100.340278
1	5041.739610	5053.580756	5065.435791	5077.304715	5089.187527	5101.084229
2	5042.479275	5054.321289	5066.177192	5078.046984	5089.930664	5101.828234
3	5043.218994	5055.061876	5066.918647	5078.789307	5090.673855	5102.572293
4	5043.958767	5055.802517	5067.660156	5079.531684	5091.417101	5103.316406
5	5044.698595	5056.543213	5068.401720	5080.274116	5092.160400	5104.060574
6	5045.438477	5057.283963	5069.143338	5081.016602	5092.903754	5104.804796
7	5046.178413	5058.024767	5069.885010	5081.759142	5093.647163	5105.649072
8	5046.918403	5058.765625	5070.626736	5082.501736	5094.390625	5106.293403
9	5047.658447	5059.506538	5071.368517	5083.244385	5095.134142	5107.037788
10	5048.398546	5060.247504	5072.110352	5083.987088	5095.877713	5107.782227
11	5049.138699	5060.988525	5072.852241	5084.729845	5096.621338	5108.526720
12	5049.878906	5061.729601	5073.594184	5085.472656	5097.365017	5109.271267
13	5050.619168	5062.470730	5074.336182	5086.215522	5098.108751	5110.015869
14	5051.359484	5063.211914	5075.078234	5086.958442	5098.852539	5110.760525
15	5052.099854	5063.953152	5075.820340	5087.701416	5099.596381	5111.505235

16ths	71′–6″	71′–7″	71′–8″	71′–9″	71′–10″	71′–11″
0	5112.250000	5124.173611	5136.111111	5148.062500	5160.027778	5172.006944
1	5112.994819	5124.919298	5136.857666	5148.809923	5160.776069	5172.756104
2	5113.739692	5125.665039	5137.604275	5149.557400	5161.524414	5173.505317
3	5114.484619	5126.410834	5138.350939	5150.304932	5162.272814	5174.254584
4	5115.229601	5127.156684	5139.097656	5151.052517	5163.021267	5175.003906
5	5115.974637	5127.902588	5139.844428	5151.800157	5163.769775	5175.753282
6	5116.719727	5128.648546	5140.591254	5152.547852	5164.518338	5176.502713
7	5117.464871	5129.394558	5141.338135	5153.295600	5165.266954	5177.252197
8	5118.210069	5130.140625	5142.085069	5154.043403	5166.015625	5178.001736
9	5118.955322	5130.886746	5142.832058	5154.791260	5166.764350	5178.751329
10	5119.700629	5131.632921	5143.579102	5155.539171	5167.513129	5179.500977
11	5120.445991	5132.379150	5144.326199	5156.287137	5168.261963	5180.250678
12	5121.191406	5133.125434	5145.073351	5157.035156	5169.010851	5181.000434
13	5121.936876	5133.871772	5145.820557	5157.783230	5169.759793	5181.750244
14	5122.682400	5134.618164	5146.567817	5158.531359	5170.508789	5182.500109
15	5123.427979	5135.364610	5147.315131	5159.279541	5171.257840	5183.250027

16ths	72′–0″	72′–1″	72′–2″	72′–3″	72′–4″	72′–5″
0	5184.000000	5196.006944	5208.027778	5220.062500	5232.111111	5244.173611
1	5184.750027	5196.757840	5208.779541	5220.815131	5232.864610	5244.927979
2	5185.500109	5197.508789	5209.531359	5221.567817	5233.618164	5245.682400
3	5186.250244	5198.259793	5210.283230	5222.320557	5234.371772	5246.436876
4	5187.000434	5199.010851	5211.035156	5223.073351	5235.125434	5247.191406
5	5187.750678	5199.761963	5211.787137	5223.826199	5235.879150	5247.945991
6	5188.500977	5200.513129	5212.539171	5224.579102	5236.632921	5248.700629
7	5189.251329	5201.264350	5213.291260	5225.332058	5237.386746	5249.455322
8	5190.001736	5202.015625	5214.043403	5226.085069	5238.140625	5250.210069
9	5190.752197	5202.766954	5214.795600	5226.838135	5238.894558	5250.964871
10	5191.502713	5203.518338	5215.547852	5227.591254	5239.648546	5251.719727
11	5192.253282	5204.269775	5216.300157	5228.344428	5240.402588	5252.474637
12	5193.003906	5205.021267	5217.052517	5229.097656	5241.156684	5253.229601
13	5193.754584	5205.772814	5217.804932	5229.850939	5241.910834	5253.984619
14	5194.505317	5206.524414	5218.557400	5230.604275	5242.665039	5254.739692
15	5195.256104	5207.276069	5219.309923	5231.357666	5243.419298	5255.494819

16ths	72′–6″	72′–7″	72′–8″	72′–9″	72′–10″	72′–11″
0	5256.250000	5268.340278	5280.444444	5292.562500	5304.694444	5316.840278
1	5257.005235	5269.096381	5281.201416	5293.320340	5305.453152	5317.599854
2	5257.760525	5269.852539	5281.958442	5294.078234	5306.211914	5318.359484
3	5258.515869	5270.608751	5282.715522	5294.836182	5306.970730	5319.119168
4	5259.271267	5271.365017	5283.472656	5295.594184	5307.729601	5319.878906
5	5260.026720	5272.121338	5284.229845	5296.352241	5308.488525	5320.638699
6	5260.782227	5272.877713	5284.987088	5297.110352	5309.247504	5321.398546
7	5261.537788	5273.634142	5285.744385	5297.868517	5310.006538	5322.158447
8	5262.293403	5274.390625	5286.501736	5298.626736	5310.765625	5322.918403
9	5263.049072	5275.147163	5287.259142	5299.385010	5311.524767	5323.678413
10	5263.804796	5275.903754	5288.016602	5300.143338	5312.283963	5324.438477
11	5264.560574	5276.660400	5288.774116	5300.901720	5313.043213	5325.198595
12	5265.316406	5277.417101	5289.531684	5301.660156	5313.802517	5325.958767
13	5266.072293	5278.173855	5290.289307	5302.418647	5314.561876	5326.718994
14	5266.828234	5278.930664	5291.046984	5303.177192	5315.321289	5327.479275
15	5267.584229	5279.687527	5291.804715	5303.935791	5316.080756	5328.239610

16ths	73′–0″	73′–1″	73′–2″	73′–3″	73′–4″	73′–5″
0	5329.000000	5341.173611	5353.361111	5365.562500	5377.777778	5390.006944
1	5329.760444	5341.934923	5354.123291	5366.325548	5378.541694	5390.771729
2	5330.520942	5342.696289	5354.885525	5367.088650	5379.305664	5391.536567
3	5331.281494	5343.457709	5355.647814	5367.851807	5380.069689	5392.301459
4	5332.042101	5344.219184	5356.410156	5368.615017	5380.833767	5393.066406
5	5332.802762	5344.980713	5357.172553	5369.378282	5381.597900	5393.831407
6	5333.563477	5345.742296	5357.935004	5370.141602	5382.362088	5394.596463
7	5334.324246	5346.503933	5358.697510	5370.904975	5383.126329	5395.361572
8	5335.085069	5347.265625	5359.460069	5371.668403	5383.890625	5396.126736
9	5335.845947	5348.027371	5360.222683	5372.431885	5384.654975	5396.891954
10	5336.606879	5348.789171	5360.985352	5373.195421	5385.419379	5397.657227
11	5337.367866	5349.551025	5361.748074	5373.959012	5386.183838	5398.422553
12	5338.128906	5350.312934	5362.510851	5374.722656	5386.948351	5399.187934
13	5338.890001	5351.074897	5363.273682	5375.486355	5387.712918	5399.953369
14	5339.651150	5351.836914	5364.036567	5376.250109	5388.477539	5400.718859
15	5340.412354	5352.598985	5364.799506	5377.013916	5389.242215	5401.484402

16ths	73′–6″	73′–7″	73′–8″	73′–9″	73′–10″	73′–11″
0	5402.250000	5414.506944	5426.777778	5439.062500	5451.361111	5463.673611
1	5403.015652	5415.273465	5427.545166	5439.830756	5452.130235	5464.443604
2	5403.781359	5416.040039	5428.312609	5440.599067	5452.899414	5465.213650
3	5404.547119	5416.806668	5429.080105	5441.367432	5453.668647	5465.983751
4	5405.312934	5417.573351	5429.847656	5442.135851	5454.437934	5466.753906
5	5406.078803	5418.340088	5430.615262	5442.904324	5455.207275	5467.524116
6	5406.844727	5419.106879	5431.382921	5443.672852	5455.976671	5468.294379
7	5407.610704	5419.873725	5432.150635	5444.441433	5456.746121	5469.064697
8	5408.376736	5420.640625	5432.918403	5445.210069	5457.515625	5469.835069
9	5409.142822	5421.407579	5433.686225	5445.978760	5458.285183	5470.605496
10	5409.908963	5422.174588	5434.454102	5446.747504	5459.054796	5471.375977
11	5410.675157	5422.941650	5435.222032	5447.516303	5459.824463	5472.146512
12	5411.441406	5423.708767	5435.990017	5448.285156	5460.594184	5472.917101
13	5412.207709	5424.475939	5436.758057	5449.054064	5461.363959	5473.687744
14	5412.974067	5425.243164	5437.526150	5449.823025	5462.133789	5474.458442
15	5413.740479	5426.010444	5438.294298	5450.592041	5462.903673	5475.229194

16ths	74′–0″	74′–1″	74′–2″	74′–3″	74′–4″	74′–5″
0	5476.000000	5488.340278	5500.694444	5513.062500	5525.444444	5537.840278
1	5476.770860	5489.112006	5501.467041	5513.835965	5526.218777	5538.615479
2	5477.541775	5489.883789	5502.239692	5514.609484	5526.993164	5539.390734
3	5478.312744	5490.655626	5503.012397	5515.383057	5527.767605	5540.166043
4	5479.083767	5491.427517	5503.785156	5516.156684	5528.542101	5540.941406
5	5479.854845	5492.199463	5504.557970	5516.930366	5529.316650	5541.716824
6	5480.625977	5492.971463	5505.330838	5517.704102	5530.091254	5542.492296
7	5481.397163	5493.743517	5506.103760	5518.477892	5530.865913	5543.267822
8	5482.168403	5494.515625	5506.876736	5519.251736	5531.640625	5544.043403
9	5482.939697	5495.287788	5507.649767	5520.025635	5532.415392	5544.819038
10	5483.711046	5496.060004	5508.422852	5520.799588	5533.190213	5545.594727
11	5484.482449	5496.832275	5509.195991	5521.573595	5533.965088	5546.370470
12	5485.253906	5497.604601	5509.969184	5522.347656	5534.740017	5547.146267
13	5486.025418	5498.376980	5510.742432	5523.121772	5535.515001	5547.922119
14	5486.796984	5499.149414	5511.515734	5523.895942	5536.290039	5548.698025
15	5487.568604	5499.921902	5512.289090	5524.670166	5537.065131	5549.473985

16ths	74′–6″	74′–7″	74′–8″	74′–9″	74′–10″	74′–11″
0	5550.250000	5562.673611	5575.111111	5587.562500	5600.027778	5612.506944
1	5551.026069	5563.450548	5575.888916	5588.341173	5600.807319	5613.287354
2	5551.802192	5564.227539	5576.666775	5589.119900	5601.586914	5614.067817
3	5552.578369	5565.004584	5577.444689	5589.898682	5602.366564	5614.848334
4	5553.354601	5565.781684	5578.222656	5590.677517	5603.146267	5615.628906
5	5554.130887	5566.558838	5579.000678	5591.456407	5603.926025	5616.409532
6	5554.907227	5567.336046	5579.778754	5592.235352	5604.705838	5617.190213
7	5555.683621	5568.113308	5580.556885	5593.014350	5605.485704	5617.970947
8	5556.460069	5568.890625	5581.335069	5593.793403	5606.265625	5618.751736
9	5557.236572	5569.667996	5582.113308	5594.572510	5607.045600	5619.532579
10	5558.013129	5570.445421	5582.891602	5595.351671	5607.825629	5620.313477
11	5558.789741	5571.222900	5583.669949	5596.130887	5608.605713	5621.094428
12	5559.566406	5572.000434	5584.448351	5596.910156	5609.385851	5621.875434
13	5560.343126	5572.778022	5585.226807	5597.689480	5610.166043	5622.656494
14	5561.119900	5573.555664	5586.005317	5598.468859	5610.946289	5623.437609
15	5561.896729	5574.333360	5586.783881	5599.248291	5611.726590	5624.218777

16ths	75′–0″	75′–1″	75′–2″	75′–3″	75′–4″	75′–5″
0	5625.000000	5637.506944	5650.027778	5662.562500	5675.111111	5687.673611
1	5625.781277	5638.289090	5650.810791	5663.346381	5675.895860	5688.459229
2	5626.562609	5639.071289	5651.593859	5664.130317	5676.680664	5689.244900
3	5627.343994	5639.853543	5652.376980	5664.914307	5677.465522	5690.030626
4	5628.125434	5640.635851	5653.160156	5665.698351	5678.250434	5690.816406
5	5628.906928	5641.418213	5653.943387	5666.482449	5679.035400	5691.602241
6	5629.688477	5642.200629	5654.726671	5667.266602	5679.820421	5692.388129
7	5630.470079	5642.983100	5655.510010	5668.050808	5680.605496	5693.174072
8	5631.251736	5643.765625	5656.293403	5668.835069	5681.390625	5693.960069
9	5632.033447	5644.548204	5657.076850	5669.619385	5682.175808	5694.746121
10	5632.815213	5645.330838	5657.860352	5670.403754	5682.961046	5695.532227
11	5633.597032	5646.113525	5658.643907	5671.188178	5683.746338	5696.318387
12	5634.378906	5646.896267	5659.427517	5671.972656	5684.531684	5697.104601
13	5635.160834	5647.679064	5660.211182	5672.757189	5685.317084	5697.890869
14	5635.942817	5648.461914	5660.994900	5673.541775	5686.102539	5698.677192
15	5636.724854	5649.244819	5661.778673	5674.326416	5686.888048	5699.463569

16ths	75′–6″	75′–7″	75′–8″	75′–9″	75′–10″	75′–11″
0	5700.250000	5712.840278	5725.444444	5738.062500	5750.694444	5763.340278
1	5701.036485	5713.627631	5726.232666	5738.851590	5751.484402	5764.131104
2	5701.823025	5714.415039	5727.020942	5739.640734	5752.274414	5764.921984
3	5702.609619	5715.202501	5727.809272	5740.429932	5753.064480	5765.712918
4	5703.396267	5715.990017	5728.597656	5741.219184	5753.854601	5766.503906
5	5704.182970	5716.777588	5729.386095	5742.008491	5754.644775	5767.294949
6	5704.969727	5717.565213	5730.174588	5742.797852	5755.435004	5768.086046
7	5705.756538	5718.352892	5730.963135	5743.587267	5756.225288	5768.877197
8	5706.543403	5719.140625	5731.751736	5744.376736	5757.015625	5769.668403
9	5707.330322	5719.928413	5732.540392	5745.166260	5757.806017	5770.459663
10	5708.117296	5720.716254	5733.329102	5745.955838	5758.596463	5771.250977
11	5708.904324	5721.504150	5734.117866	5746.745470	5759.386963	5772.042345
12	5709.691406	5722.292101	5734.906684	5747.535156	5760.177517	5772.833767
13	5710.478543	5723.080105	5735.695557	5748.324897	5760.968126	5773.625244
14	5711.265734	5723.868164	5736.484484	5749.114692	5761.758789	5774.416775
15	5712.052979	5724.656277	5737.273465	5749.904541	5762.549506	5775.208360

16ths	76′–0″	76′–1″	76′–2″	76′–3″	76′–4″	76′–5″
0	5776.000000	5788.673611	5801.361111	5814.062500	5826.777778	5839.506944
1	5776.791694	5789.466173	5802.154541	5814.856798	5827.572944	5840.302979
2	5777.583442	5790.258789	5802.948025	5815.651150	5828.368164	5841.099067
3	5778.375244	5791.051459	5803.741564	5816.445557	5829.163439	5841.895209
4	5779.167101	5791.844184	5804.535156	5817.240017	5829.958767	5842.691406
5	5779.959012	5792.636963	5805.328803	5818.034532	5830.754150	5843.487657
6	5780 750977	5793.429796	5806.122504	5818.829102	5831.549588	5844.283963
7	5781.542996	5794.222683	5806.916260	5819.623725	5832.345079	5845.080322
8	5782.335069	5795.015625	5807.710069	5820.418403	5833.140625	5845.876736
9	5783.127197	5795.808621	5808.503933	5821.213135	5833.936225	5846.673204
10	5783.919379	5796.601671	5809.297852	5822.007921	5834.731879	5847.469727
11	5784.711616	5797.394775	5810.091824	5822.802762	5835.527588	5848.266303
12	5785.503906	5798.187934	5810.885851	5823.597656	5836.323351	5849.062934
13	5786.296251	5798.981147	5811.679932	5824.392605	5837.119168	5849.859619
14	5787.088650	5799.774414	5812.474067	5825.187609	5837.915039	5850.656359
15	5787.881104	5800.567735	5813.268256	5825.982666	5838.710965	5851.453152

16ths	76′–6″	76′–7″	76′–8″	76′–9″	76′–10″	76′–11″
0	5852.250000	5865.006944	5877.777778	5890.562500	5903.361111	5916.173611
1	5853.046902	5865.804715	5878.576416	5891.362006	5904.161485	5916.974854
2	5853.843859	5866.602539	5879.375109	5892.161567	5904.961914	5917.776150
3	5854.640869	5867.400418	5880.173855	5892.961182	5905.762397	5918.577501
4	5855.437934	5868.198351	5880.972656	5893.760851	5906.562934	5919.378906
5	5856.235053	5868.996338	5881.771512	5894.560574	5907.363525	5920.180366
6	5857.032227	5869.794379	5882.570421	5895.360352	5908.164171	5920.981879
7	5857.829454	5870.592475	5883.369385	5896.160183	5908.964871	5921.783447
8	5858.626736	5871.390625	5884.168403	5896.960069	5909.765625	5922.585069
9	5859.424072	5872.188829	5884.967475	5897.760010	5910.566433	5923.386746
10	5860.221463	5872.987088	5885.766602	5898.560004	5911.367296	5924.188477
11	5861.018907	5873.785400	5886.565782	5899.360053	5912.168213	5924.990262
12	5861.816406	5874.583767	5887.365017	5900.160156	5912.969184	5925.792101
13	5862.613959	5875.382189	5888.164307	5900.960314	5913.770209	5926.593994
14	5863.411567	5876.180664	5888.963650	5901.760525	5914.571289	5927.395942
15	5864.209229	5876.979194	5889.763048	5902.560791	5915.372423	5928.197944

16ths	77′–0″	77′–1″	77′–2″	77′–3″	77′–4″	77′–5″
0	5929.000000	5941.840278	5954.694444	5967.562500	5980.444444	5993.340278
1	5929.802110	5942.643256	5955.498291	5968.367215	5981.250027	5994.146729
2	5930.604275	5943.446289	5956.302192	5969.171984	5982.055664	5994.953234
3	5931.406494	5944.249376	5957.106147	5969.976807	5982.861355	5995.759793
4	5932.208767	5945.052517	5957.910156	5970.781684	5983.667101	5996.566406
5	5933.011095	5945.855713	5958.714220	5971.586616	5984.472900	5997.373074
6	5933.813477	5946.658963	5959.518338	5972.391602	5985.278754	5998.179796
7	5934.615913	5947.462267	5960.322510	5973.196642	5986.084663	5998.986572
8	5935.418403	5948.265625	5961.126736	5974.001736	5986.890625	5999.793403
9	5936.220947	5949.069038	5961.931017	5974.806885	5987.696642	6000.600288
10	5937.023546	5949.872504	5962.735352	5975.612088	5988.502713	6001.407227
11	5937.826199	5950.676025	5963.539741	5976.417345	5989.308838	6002.214220
12	5938.628906	5951.479601	5964.344184	5977.222656	5990.115017	6003.021267
13	5939.431668	5952.283230	5965.148682	5978.028022	5990.921251	6003.828369
14	5940.234484	5953.086914	5965.953234	5978.833442	5991.727539	6004.635525
15	5941.037354	5953.890652	5966.757840	5979.638916	5992.533881	6005.442735

16ths	77′–6″	77′–7″	77′–8″	77′–9″	77′–10″	77′–11″
0	6006.250000	6019.173611	6032.111111	6045.062500	6058.027778	6071.006944
1	6007.057319	6019.981798	6032.920166	6045.872423	6058.838569	6071.818604
2	6007.864692	6020.790039	6033.729275	6046.682400	6059.649414	6072.630317
3	6008.672119	6021.598334	6034.538439	6047.492432	6060.460314	6073.442084
4	6009.479601	6022.406684	6035.347656	6048.302517	6061.271267	6074.253906
5	6010.287137	6023.215088	6036.156928	6049.112657	6062.082275	6075.065782
6	6011.094727	6024.023546	6036.966254	6049.922852	6062.893338	6075.877713
7	6011.902371	6024.832058	6037.775635	6050.733100	6063.704454	6076.689697
8	6012.710069	6025.640625	6038.585069	6051.543403	6064.515625	6077.501736
9	6013.517822	6026.449246	6039.394558	6052.353760	6065.326850	6078.313829
10	6014.325629	6027.257921	6040.204102	6053.164171	6066.138129	6079.125977
11	6015.133491	6028.066650	6041.013699	6053.974637	6066.949463	6079.938178
12	6015.941406	6028.875434	6041.823351	6054.785156	6067.760851	6080.750434
13	6016.749376	6029.684272	6042.633057	6055.595730	6068.572293	6081.562744
14	6017.557400	6030.493164	6043.442817	6056.406359	6069.383789	6082.375109
15	6018.365479	6031.302110	6044.252631	6057.217041	6070.195340	6083.187527

16ths	78′–0″	78′–1″	78′–2″	78′–3″	78′–4″	78′–5″
0	6084.000000	6097.006944	6110.027778	6123.062500	6136.111111	6149.173611
1	6084.812527	6097.820340	6110.842041	6123.877631	6136.927110	6149.990479
2	6085.625109	6098.633789	6111.656359	6124.692817	6137.743164	6150.807400
3	6086.437744	6099.447293	6112.470730	6125.508057	6138.559272	6151.624376
4	6087.250434	6100.260851	6113.285156	6126.323351	6139.375434	6152.441406
5	6088.063178	6101.074463	6114.099637	6127.138699	6140.191650	6153.258491
6	6088.875977	6101.888129	6114.914171	6127.954102	6141.007921	6154.075629
7	6089.688829	6102.701850	6115.728760	6128.769558	6141.824246	6154.892822
8	6090.501736	6103.515625	6116.543403	6129.585069	6142.640625	6155.710069
9	6091.314697	6104.329454	6117.358100	6130.400635	6143.457058	6156.527371
10	6092.127713	6105.143338	6118.172852	6131.216254	6144.273546	6157.344727
11	6092.940782	6105.957275	6118.987657	6132.031928	6145.090088	6158.162137
12	6093.753906	6106.771267	6119.802517	6132.847656	6145.906684	6158.979601
13	6094.567084	6107.585314	6120.617432	6133.663439	6146.723334	6159.797119
14	6095.380317	6108.399414	6121.432400	6134.479275	6147.540039	6160.614692
15	6096.193604	6109.213569	6122.247423	6135.295166	6148.356798	6161.432319

16ths	78′–6″	78′–7″	78′–8″	78′–9″	78′–10″	78′–11″
0	6162.250000	6175.340278	6188.444444	6201.562500	6214.694444	6227.840278
1	6163.067735	6176.158881	6189.263916	6202.382840	6215.515652	6228.662354
2	6163.885525	6176.977539	6190.083442	6203.203234	6216.336914	6229.484484
3	6164.703369	6177.796251	6190.903022	6204.023682	6217.158230	6230.306668
4	6165.521267	6178.615017	6191.722656	6204.844184	6217.979601	6231.128906
5	6166.339220	6179.433838	6192.542345	6205.664741	6218.801025	6231.951199
6	6167.157227	6180.252713	6193.362088	6206.485352	6219.622504	6232.773546
7	6167.975288	6181.071642	6194.181885	6207.306017	6220.444038	6233.595947
8	6168.793403	6181.890625	6195.001736	6208.126736	6221.265625	6234.418403
9	6169.611572	6182.709663	6195.821642	6208.947510	6222.087267	6235.240913
10	6170.429796	6183.528754	6196.641602	6209.768338	6222.908963	6236.063477
11	6171.248074	6184.347900	6197.461616	6210.589220	6223.730713	6236.886095
12	6172.066406	6185.167101	6198.281684	6211.410156	6224.552517	6237.708767
13	6172.884793	6185.986355	6199.101807	6212.231147	6225.374376	6238.531494
14	6173.703234	6186.805664	6199.921984	6213.052192	6226.196289	6239.354275
15	6174.521729	6187.625027	6200.742215	6213.873291	6227.018256	6240.177110

16ths	79′–0″	79′–1″	79′–2″	79′–3″	79′–4″	79′–5″
0	6241.000000	6254.173611	6267.361111	6280.562500	6293.777778	6307.006944
1	6241.822944	6254.997423	6268.185791	6281.388048	6294.604194	6307.834229
2	6242.645942	6255.821289	6269.010525	6282.213650	6295.430664	6308.661567
3	6243.468994	6256.645209	6269.835314	6283.039307	6296.257189	6309.488959
4	6244.292101	6257.469184	6270.660156	6283.865017	6297.083767	6310.316406
5	6245.115262	6258.293213	6271.485053	6284.690782	6297.910400	6311.143907
6	6245.938477	6259.117296	6272.310004	6285.516602	6298.737088	6311.971463
7	6246.761746	6259.941433	6273.135010	6286.342475	6299.563829	6312.799072
8	6247.585069	6260.765625	6273.960069	6287.168403	6300.390625	6313.626736
9	6248.408447	6261.589871	6274.785183	6287.994385	6301.217475	6314.454454
10	6249.231879	6262.414171	6275.610352	6288.820421	6302.044379	6315.282227
11	6250.055366	6263.238525	6276.435574	6289.646512	6302.871338	6316.110053
12	6250.878906	6264.062934	6277.260851	6290.472656	6303.698351	6316.937934
13	6251.702501	6264.887397	6278.086182	6291.298855	6304.525418	6317.765869
14	6252.526150	6265.711914	6278.911567	6292.125109	6305.352539	6318.593859
15	6253.349854	6266.536485	6279.737006	6292.951416	6306.179715	6319.421902

16ths	79′–6″	79′–7″	79′–8″	79′–9″	79′–10″	79′–11″
0	6320.250000	6333.506944	6346.777778	6360.062500	6373.361111	6386.673611
1	6321.078152	6334.335965	6347.607666	6360.893256	6374.192735	6387.506104
2	6321.906359	6335.165039	6348.437609	6361.724067	6375.024414	6388.338650
3	6322.734619	6335.994168	6349.267605	6362.554932	6375.856147	6389.171251
4	6323.562934	6336.823351	6350.097656	6363.385851	6376.687934	6390.003906
5	6324.391303	6337.652588	6350.927762	6364.216824	6377.519775	6390.836616
6	6325.219727	6338.481879	6351.757921	6365.047852	6378.351671	6391.669379
7	6326.048204	6339.311225	6352.588135	6365.878933	6379.183621	6392.502197
8	6326.876736	6340.140625	6353.418403	6366.710069	6380.015625	6393.335069
9	6327.705322	6340.970079	6354.248725	6367.541260	6380.847683	6394.167996
10	6328.533963	6341.799588	6355.079102	6368.372504	6381.679796	6395.000977
11	6329.362657	6342.629150	6355.909532	6369.203803	6382.511963	6395.834012
12	6330.191406	6343.458767	6356.740017	6370.035156	6383.344184	6396.667101
13	6331.020209	6344.288439	6357.570557	6370.866564	6384.176459	6397.500244
14	6331.849067	6345.118164	6358.401150	6371.698025	6385.008789	6398.333442
15	6332.677979	6345.947944	6359.231798	6372.529541	6385.841173	6399.166694

16ths	80′–0″	80′–1″	80′–2″	80′–3″	80′–4″	80′–5″
0	6400.000000	6413.340278	6426.694444	6440.062500	6453.444444	6466.840278
1	6400.833360	6414.174506	6427.529541	6440.898465	6454.281277	6467.677979
2	6401.666775	6415.008789	6428.364692	6441.734484	6455.118164	6468.515734
3	6402.500244	6415.843126	6429.199897	6442.570557	6455.955105	6469.353543
4	6403.333767	6416.677517	6430.035156	6443.406684	6456.792101	6470.191406
5	6404.167345	6417.511963	6430.870470	6444.242866	6457.629150	6471.029324
6	6405.000977	6418.346463	6431.705838	6445.079102	6458.466254	6471.867296
7	6405.834663	6419.181017	6432.541260	6445.915392	6459.303413	6472.705322
8	6406.668403	6420.015625	6433.376736	6446.751736	6460.140625	6473.543403
9	6407.502197	6420.850288	6434.212267	6447.588135	6460.977892	6474.381538
10	6408.336046	6421.685004	6435.047852	6448.424588	6461.815213	6475.219727
11	6409.169949	6422.519775	6435.883491	6449.261095	6462.652588	6476.057970
12	6410.003906	6423.354601	6436.719184	6450.097656	6463.490017	6476.896267
13	6410.837918	6424.189480	6437.554932	6450.934272	6464.327501	6477.734619
14	6411.671984	6425.024414	6438.390734	6451.770942	6465.165039	6478.573025
15	6412.506104	6425.859402	6439.226590	6452.607666	6466.002631	6479.411485

16ths	80′–6″	80′–7″	80′–8″	80′–9″	80′–10″	80′–11″
0	6480.250000	6493.673611	6507.111111	6520.562500	6534.027778	6547.506944
1	6481.088569	6494.513048	6507.951416	6521.403673	6534.869819	6548.349854
2	6481.927192	6495.352539	6508.791775	6522.244900	6535.711914	6549.192817
3	6482.765869	6496.192084	6509.632189	6523.086182	6536.554064	6550.035834
4	6483.604601	6497.031684	6510.472656	6523.927517	6537.396267	6550.878906
5	6484.443387	6497.871338	6511.313178	6524.768907	6538.238525	6551.722032
6	6485.282227	6498.711046	6512.153754	6525.610352	6539.080838	6552.565213
7	6486.121121	6499.550808	6512.994385	6526.451850	6539.923204	6553.408447
8	6486.960069	6500.390625	6513.835069	6527.293403	6540.765625	6554.251736
9	6487.799072	6501.230496	6514.675808	6528.135010	6541.608100	6555.095079
10	6488.638129	6502.070421	6515.516602	6528.976671	6542.450629	6555.938477
11	6489.477241	6502.910400	6516.357449	6529.818387	6543.293213	6556.781928
12	6490.316406	6503.750434	6517.198351	6530.660156	6544.135851	6557.625434
13	6491.155626	6504.590522	6518.039307	6531.501980	6544.978543	6558.468994
14	6491.994900	6505.430664	6518.880317	6532.343859	6545.821289	6559.312609
15	6492.834229	6506.270860	6519.721381	6533.185791	6546.664090	6560.156277

16ths	81′–0″	81′–1″	81′–2″	81′–3″	81′–4″	81′–5″
0	6561.000000	6574.506944	6588.027778	6601.562500	6615.111111	6628.673611
1	6561.843777	6575.351590	6588.873291	6602.408881	6615.958360	6629.521729
2	6562.687609	6576.196289	6589.718859	6603.255317	6616.805664	6630.369900
3	6563.531494	6577.041043	6590.564480	6604.101807	6617.653022	6631.218126
4	6564.375434	6577.885851	6591.410156	6604.948351	6618.500434	6632.066406
5	6565.219428	6578.730713	6592.255887	6605.794949	6619.347900	6632.914741
6	6566.063477	6579.575629	6593.101671	6606.641602	6620.195421	6633.763129
7	6566.907579	6580.420600	6593.947510	6607.488308	6621.042996	6634.611572
8	6567.751736	6581.265625	6594.793403	6608.335069	6621.890625	6635.460069
9	6568.595947	6582.110704	6595.639350	6609.181885	6622.738308	6636.308621
10	6569.440213	6582.955838	6596.485352	6610.028754	6623.586046	6637.157227
11	6570.284532	6583.801025	6597.331407	6610.875678	6624.433838	6638.005887
12	6571.128906	6584.646267	6598.177517	6611.722656	6625.281684	6638.854601
13	6571.973334	6585.491564	6599.023682	6612.569689	6626.129584	6639.703369
14	6572.817817	6586.336914	6599.869900	6613.416775	6626.977539	6640.552192
15	6573.662354	6587.182319	6600.716173	6614.263916	6627.825548	6641.401069

16ths	81′–6″	81′–7″	81′–8″	81′–9″	81′–10″	81′–11″
0	6642.250000	6655.840278	6669.444444	6683.062500	6696.694444	6710.340278
1	6643.098985	6656.690131	6670.295166	6683.914090	6697.546902	6711.193604
2	6643.948025	6657.540039	6671.145942	6684.765734	6698.399414	6712.046984
3	6644.797119	6658.390001	6671.996772	6685.617432	6699.251980	6712.900418
4	6645.646267	6659.240017	6672.847656	6686.469184	6700.104601	6713.753906
5	6646.495470	6660.090088	6673.698595	6687.320991	6700.957275	6714.607449
6	6647.344727	6660.940213	6674.549588	6688.172852	6701.810004	6715.461046
7	6648.194038	6661.790392	6675.400635	6689.024767	6702.662788	6716.314697
8	6649.043403	6662.640625	6676.251736	6689.876736	6703.515625	6717.168403
9	6649.892822	6663.490913	6677.102892	6690.728760	6704.368517	6718.022163
10	6650.742296	6664.341254	6677.954102	6691.580838	6705.221463	6718.875977
11	6651.591824	6665.191650	6678.805366	6692.432970	6706.074463	6719.729845
12	6652.441406	6666.042101	6679.656684	6693.285156	6706.927517	6720.583767
13	6653.291043	6666.892605	6680.508057	6694.137397	6707.780626	6721.437744
14	6654.140734	6667.743164	6681.359484	6694.989692	6708.633789	6722.291775
15	6654.990479	6668.593777	6682.210965	6695.842041	6709.487006	6723.145860

16ths	82′–0″	82′–1″	82′–2″	82′–3″	82′–4″	82′–5″
0	6724.000000	6737.673611	6751.361111	6765.062500	6778.777778	6792.506944
1	6724.854194	6738.528673	6752.217041	6765.919298	6779.635444	6793.365479
2	6725.708442	6739.383789	6753.073025	6766.776150	6780.493164	6794.224067
3	6726.562744	6740.238959	6753.929064	6767.633057	6781.350939	6795.082709
4	6727.417101	6741.094184	6754.785156	6768.490017	6782.208767	6795.941406
5	6728.271512	6741.949463	6755.641303	6769.347032	6783.066650	6796.800157
6	6729.125977	6742.804796	6756.497504	6770.204102	6783.924588	6797.658963
7	6729.980496	6743.660183	6757.353760	6771.061225	6784.782579	6798.517822
8	6730.835069	6744.515625	6758.210069	6771.918403	6785.640625	6799.376736
9	6731.689697	6745.371121	6759.066433	6772.775635	6786.498725	6800.235704
10	6732.544379	6746.226671	6759.922852	6773.632921	6787.356879	6801.094727
11	6733.399116	6747.082275	6760.779324	6774.490262	6788.215088	6801.953803
12	6734.253906	6747.937934	6761.635851	6775.347656	6789.073351	6802.812934
13	6735.108751	6748.793647	6762.492432	6776.205105	6789.931668	6803.672119
14	6735.963650	6749.649414	6763.349067	6777.062609	6790.790039	6804.531359
15	6736.818604	6750.505235	6764.205756	6777.920166	6791.648465	6805.390652

16ths	82′–6″	82′–7″	82′–8″	82′–9″	82′–10″	82′–11″
0	6806.250000	6820.006944	6833.777778	6847.562500	6861.361111	6875.173611
1	6807.109402	6820.867215	6834.638916	6848.424506	6862.223985	6876.037354
2	6807.968859	6821.727539	6835.500109	6849.286567	6863.086914	6876.901150
3	6808.828369	6822.587918	6836.361355	6850.148682	6863.949897	6877.765001
4	6809.687934	6823.448351	6837.222656	6851.010851	6864.812934	6878.628906
5	6810.547553	6824.308838	6838.084012	6851.873074	6865.676025	6879.492866
6	6811.407227	6825.169379	6838.945421	6852.735352	6866.539171	6880.356879
7	6812.266954	6826.029975	6839.806885	6853.597683	6867.402371	6881.220947
8	6813.126736	6826.890625	6840.668403	6854.460069	6868.265625	6882.085069
9	6813.986572	6827.751329	6841.529975	6855.322510	6869.128933	6882.949246
10	6814.846463	6828.612088	6842.391602	6856.185004	6869.992296	6883.813477
11	6815.706407	6829.472900	6843.253282	6857.047553	6870.855713	6884.677762
12	6816.566406	6830.333767	6844.115017	6857.910156	6871.719184	6885.542101
13	6817.426459	6831.194689	6844.976807	6858.772814	6872.582709	6886.406494
14	6818.286567	6832.055664	6845.838650	6859.635525	6873.446289	6887.270942
15	6819.146729	6832.916694	6846.700548	6860.498291	6874.309923	6888.135444

16ths	83′–0″	83′–1″	83′–2″	83′–3″	83′–4″	83′–5″
0	6889.000000	6902.840278	6916.694444	6930.562500	6944.444444	6958.340278
1	6889.864610	6903.705756	6917.560791	6931.429715	6945.312527	6959.209229
2	6890.729275	6904.571289	6918.427192	6932.296984	6946.180664	6960.078234
3	6891.593994	6905.436876	6919.293647	6933.164307	6947.048855	6960.947293
4	6892.458767	6906.302517	6920.160156	6934.031684	6947.917101	6961.816406
5	6893.323595	6907.168213	6921.026720	6934.899116	6948.785400	6962.685574
6	6894.188477	6908.033963	6921.893338	6935.766602	6949.653754	6963.554796
7	6895.053413	6908.899767	6922.760010	6936.634142	6950.522163	6964.424072
8	6895.918403	6909.765625	6923.626736	6937.501736	6951.390625	6965.293403
9	6896.783447	6910.631538	6924.493517	6938.369385	6952.259142	6966.162788
10	6897.648546	6911.497504	6925.360352	6939.237088	6953.127713	6967.032227
11	6898.513699	6912.363525	6926.227241	6940.104845	6953.996338	6967.901720
12	6899.378906	6913.229601	6927.094184	6940.972656	6954.865017	6968.771267
13	6900.244168	6914.095730	6927.961182	6941.840522	6955.733751	6969.640869
14	6901.109484	6914.961914	6928.828234	6942.708442	6956.602539	6970.510525
15	6901.974854	6915.828152	6929.695340	6943.576416	6957.471381	6971.380235

16ths	83′–6″	83′–7″	83′–8″	83′–9″	83′–10″	83′–11″
0	6972.250000	6986.173611	7000.111111	7014.062500	7028.027778	7042.006944
1	6973.119819	6987.044298	7000.982666	7014.934923	7028.901069	7042.881104
2	6973.989692	6987.915039	7001.854275	7015.807400	7029.774414	7043.755317
3	6974.859619	6988.785834	7002.725939	7016.679932	7030.647814	7044.629584
4	6975.729601	6989.656684	7003.597656	7017.552517	7031.521267	7045.503906
5	6976.599637	6990.527588	7004.469428	7018.425157	7032.394775	7046.378282
6	6977.469727	6991.398546	7005.341254	7019.297852	7033.268338	7047.252713
7	6978.339871	6992.269558	7006.213135	7020.170600	7034.141954	7048.127197
8	6979.210069	6993.140625	7007.085069	7021.043403	7035.015625	7049.001736
9	6980.080322	6994.011746	7007.957058	7021.916260	7035.889350	7049.876329
10	6980.950629	6994.882921	7008.829102	7022.789171	7036.763129	7050.750977
11	6981.820991	6995.754150	7009.701199	7023.662137	7037.636963	7051.625678
12	6982.691406	6996.625434	7010.573351	7024.535156	7038.510851	7052.500434
13	6983.561876	6997.496772	7011.445557	7025.408230	7039.384793	7053.375244
14	6984.432400	6998.368164	7012.317817	7026.281359	7040.258789	7054.250109
15	6985.302979	6999.239610	7013.190131	7027.154541	7041.132840	7055.125027

16ths	84′–0″	84′–1″	84′–2″	84′–3″	84′–4″	84′–5″
0	7056.000000	7070.006944	7084.027778	7098.062500	7112.111111	7126.173611
1	7056.875027	7070.882840	7084.904541	7098.940131	7112.989610	7127.052979
2	7057.750109	7071.758789	7085.781359	7099.817817	7113.868164	7127.932400
3	7058.625244	7072.634793	7086.658230	7100.695557	7114.746772	7128.811876
4	7059.500434	7073.510851	7087.535156	7101.573351	7115.625434	7129.691406
5	7060.375678	7074.386963	7088.412137	7102.451199	7116.504150	7130.570991
6	7061.250977	7075.263129	7089.289171	7103.329102	7117.382921	7131.450629
7	7062.126329	7076.139350	7090.166260	7104.207058	7118.261746	7132.330322
8	7063.001736	7077.015625	7091.043403	7105.085069	7119.140625	7133.210069
9	7063.877197	7077.891954	7091.920600	7105.963135	7120.019558	7134.089871
10	7064.752713	7078.768338	7092.797852	7106.841254	7120.898546	7134.969727
11	7065.628282	7079.644775	7093.675157	7107.719428	7121.777588	7135.849637
12	7066.503906	7080.521267	7094.552517	7108.597656	7122.656684	7136.729601
13	7067.379584	7081.397814	7095.429932	7109.475939	7123.535834	7137.609619
14	7068.255317	7082.274414	7096.307400	7110.354275	7124.415039	7138.489692
15	7069.131104	7083.151069	7097.184923	7111.232666	7125.294298	7139.369819

16ths	84′–6″	84′–7″	84′–8″	84′–9″	84′–10″	84′–11″
0	7140.250000	7154.340278	7168.444444	7182.562500	7196.694444	7210.840278
1	7141.130235	7155.221381	7169.326416	7183.445340	7197.578152	7211.724854
2	7142.010525	7156.102539	7170.208442	7184.328234	7198.461914	7212.609484
3	7142.890869	7156.983751	7171.090522	7185.211182	7199.345730	7213.494168
4	7143.771267	7157.865017	7171.972656	7186.094184	7200.229601	7214.378906
5	7144.651720	7158.746338	7172.854845	7186.977241	7201.113525	7215.263699
6	7145.532227	7159.627713	7173.737088	7187.860352	7201.997504	7216.148546
7	7146.412788	7160.509142	7174.619385	7188.743517	7202.881538	7217.033447
8	7147.293403	7161.390625	7175.501736	7189.626736	7203.765625	7217.918403
9	7148.174072	7162.272163	7176.384142	7190.510010	7204.649767	7218.803413
10	7149.054796	7163.153754	7177.266602	7191.393338	7205.533963	7219.688477
11	7149.935574	7164.035400	7178.149116	7192.276720	7206.418213	7220.573595
12	7150.816406	7164.917101	7179.031684	7193.160156	7207.302517	7221.458767
13	7151.697293	7165.798855	7179.914307	7194.043647	7208.186876	7222.343994
14	7152.578234	7166.680664	7180.796984	7194.927192	7209.071289	7223.229275
15	7153.459229	7167.562527	7181.679715	7195.810791	7209.955756	7224.114610

16ths	85′–0″	85′–1″	85′–2″	85′–3″	85′–4″	85′–5″
0	7225.000000	7239.173611	7253.361111	7267.562500	7281.777778	7296.006944
1	7225.885444	7240.059923	7254.248291	7268.450548	7282.666694	7296.896729
2	7226.770942	7240.946289	7255.135525	7269.338650	7283.555664	7297.786567
3	7227.656494	7241.832709	7256.022814	7270.226807	7284.444689	7298.676459
4	7228.542101	7242.719184	7256.910156	7271.115017	7285.333767	7299.566406
5	7229.427762	7243.605713	7257.797553	7272.003282	7286.222900	7300.456407
6	7230.313477	7244.492296	7258.685004	7272.891602	7287.112088	7301.346463
7	7231.199246	7245.378933	7259.572510	7273.779975	7288.001329	7302.236572
8	7232.085069	7246.265625	7260.460069	7274.668403	7288.890625	7303.126736
9	7232.970947	7247.152371	7261.347683	7275.556885	7289.779975	7304.016954
10	7233.856879	7248.039171	7262.235352	7276.445421	7290.669379	7304.907227
11	7234.742866	7248.926025	7263.123074	7277.334012	7291.558838	7305.797553
12	7235.628906	7249.812934	7264.010851	7278.222656	7292.448351	7306.687934
13	7236.515001	7250.699897	7264.898682	7279.111355	7293.337918	7307.578369
14	7237.401150	7251.586914	7265.786567	7280.000109	7294.227539	7308.468859
15	7238.287354	7252.473985	7266.674506	7280.888916	7295.117215	7309.359402

16ths	85′–6″	85′–7″	85′–8″	85′–9″	85′–10″	85′–11″
0	7310.250000	7324.506944	7338.777778	7353.062500	7367.361111	7381.673611
1	7311.140652	7325.398465	7339.670166	7353.955756	7368.255235	7382.568604
2	7312.031359	7326.290039	7340.562609	7354.849067	7369.149414	7383.463650
3	7312.922119	7327.181668	7341.455105	7355.742432	7370.043647	7384.358751
4	7313.812934	7328.073351	7342.347656	7356.635851	7370.937934	7385.253906
5	7314.703803	7328.965088	7343.240262	7357.529324	7371.832275	7386.149116
6	7315.594727	7329.856879	7344.132921	7358.422852	7372.726671	7387.044379
7	7316.485704	7330.748725	7345.025635	7359.316433	7373.621121	7387.939697
8	7317.376736	7331.640625	7345.918403	7360.210069	7374.515625	7388.835069
9	7318.267822	7332.532579	7346.811225	7361.103760	7375.410183	7389.730496
10	7319.158963	7333.424588	7347.704102	7361.997504	7376.304796	7390.625977
11	7320.050157	7334.316650	7348.597032	7362.891303	7377.199463	7391.521512
12	7320.941406	7335.208767	7349.490017	7363.785156	7378.094184	7392.417101
13	7321.832709	7336.100939	7350.383057	7364.679064	7378.988959	7393.312744
14	7322.724067	7336.993164	7351.276150	7365.573025	7379.883789	7394.208442
15	7323.615479	7337.885444	7352.169298	7366.467041	7380.778673	7395.104194

16ths	86′–0″	86′–1″	86′–2″	86′–3″	86′–4″	86′–5″
0	7396.000000	7410.340278	7424.694444	7439.062500	7453.444444	7467.840278
1	7396.895860	7411.237006	7425.592041	7439.960965	7454.343777	7468.740479
2	7397.791775	7412.133789	7426.489692	7440.859484	7455.243164	7469.640734
3	7398.687744	7413.030626	7427.387397	7441.758057	7456.142605	7470.541043
4	7399.583767	7413.927517	7428.285156	7442.656684	7457.042101	7471.441406
5	7400.479845	7414.824463	7429.182970	7443.555366	7457.941650	7472.341824
6	7401.375977	7415.721463	7430.080838	7444.454102	7458.841254	7473.242296
7	7402.272163	7416.618517	7430.978760	7445.352892	7459.740913	7474.142822
8	7403.168403	7417.515625	7431.876736	7446.251736	7460.640625	7475.043403
9	7404.064697	7418.412788	7432.774767	7447.150635	7461.540392	7475.944038
10	7404.961046	7419.310004	7433.672852	7448.049588	7462.440213	7476.844727
11	7405.857449	7420.207275	7434.570991	7448.948595	7463.340088	7477.745470
12	7406.753906	7421.104601	7435.469184	7449.847656	7464.240017	7478.646267
13	7407.650418	7422.001980	7436.367432	7450.746772	7465.140001	7479.547119
14	7408.546984	7422.899414	7437.265734	7451.645942	7466.040039	7480.448025
15	7409.443604	7423.796902	7438.164090	7452.545166	7466.940131	7481.348985

16ths	86′–6″	86′–7″	86′–8″	86′–9″	86′–10″	86′–11″
0	7482.250000	7496.673611	7511.111111	7525.562500	7540.027778	7554.506944
1	7483.151069	7497.575548	7512.013916	7526.466173	7540.932319	7555.412354
2	7484.052192	7498.477539	7512.916775	7527.369900	7541.836914	7556.317817
3	7484.953369	7499.379584	7513.819689	7528.273682	7542.741564	7557.223334
4	7485.854601	7500.281684	7514.722656	7529.177517	7543.646267	7558.128906
5	7486.755887	7501.183838	7515.625678	7530.081407	7544.551025	7559.034532
6	7487.657227	7502.086046	7516.528754	7530.985352	7545.455838	7559.940213
7	7488.558621	7502.988308	7517.431885	7531.889350	7546.360704	7560.845947
8	7489.460069	7503.890625	7518.335069	7532.793403	7547.265625	7561.751736
9	7490.361572	7504.792996	7519.238308	7533.697510	7548.170600	7562.657579
10	7491.263129	7505.695421	7520.141602	7534.601671	7549.075629	7563.563477
11	7492.164741	7506.597900	7521.044949	7535.505887	7549.980713	7564.469428
12	7493.066406	7507.500434	7521.948351	7536.410156	7550.885851	7565.375434
13	7493.968126	7508.403022	7522.851807	7537.314480	7551.791043	7566.281494
14	7494.869900	7509.305664	7523.755317	7538.218859	7552.696289	7567.187609
15	7495 771729	7510.208360	7524.658881	7539.123291	7553.601590	7568.093777

16ths	87′–0″	87′–1″	87′–2″	87′–3″	87′–4″	87′–5″
0	7569.000000	7583.506944	7598.027778	7612.562500	7627.111111	7641.673611
1	7569.906277	7584.414090	7598.935791	7613.471381	7628.020860	7642.584229
2	7570.812609	7585.321289	7599.843859	7614.380317	7628.930664	7643.494900
3	7571.718994	7586.228543	7600.751980	7615.289307	7629.840522	7644.405626
4	7572.625434	7587.135851	7601.660156	7616.198351	7630.750434	7645.316406
5	7573.531928	7588.043213	7602.568387	7617.107449	7631.660400	7646.227241
6	7574.438477	7588.950629	7603.476671	7618.016602	7632.570421	7647.138129
7	7575.345079	7589.858100	7604.385010	7618.925808	7633.480496	7648.049072
8	7576.251736	7590.765625	7605.293403	7619.835069	7634.390625	7648.960069
9	7577.158447	7591.673204	7606.201850	7620.744385	7635.300808	7649.871121
10	7578.065213	7592.580838	7607.110352	7621.653754	7636.211046	7650.782227
11	7578.972032	7593.488525	7608.018907	7622.563178	7637.121338	7651.693387
12	7579.878906	7594.396267	7608.927517	7623.472656	7638.031684	7652.604601
13	7580.785834	7595.304064	7609.836182	7624.382189	7638.942084	7653.515869
14	7581.692817	7596.211914	7610.744900	7625.291775	7639.852539	7654.427192
15	7582.599854	7597.119819	7611.653673	7626.201416	7640.763048	7655.338569

16ths	87′-6″	87′-7″	87′-8″	87′-9″	87′-10″	87′-11″
0	7656.250000	7670.840278	7685.444444	7700.062500	7714.694444	7729.340278
1	7657.161485	7671.752631	7686.357666	7700.976590	7715.609402	7730.256104
2	7658.073025	7672.665039	7687.270942	7701.890734	7716.524414	7731.171984
3	7658.984619	7673.577501	7688.184272	7702.804932	7717.439480	7732.087918
4	7659.896267	7674.490017	7689.097656	7703.719184	7718.354601	7733.003906
5	7660.807970	7675.402588	7690.011095	7704.633491	7719.269775	7733.919949
6	7661.719727	7676.315213	7690.924588	7705.547852	7720.185004	7734.836046
7	7662.631538	7677.227892	7691.838135	7706.462267	7721.100288	7735.752197
8	7663.543403	7678.140625	7692.751736	7707.376736	7722.015625	7736.668403
9	7664.455322	7679.053413	7693.665392	7708.291260	7722.931017	7737.584663
10	7665.367296	7679.966254	7694.579102	7709.205838	7723.846463	7738.500977
11	7666.279324	7680.879150	7695.492866	7710.120470	7724.761963	7739.417345
12	7667.191406	7681.792101	7696.406684	7711.035156	7725.677517	7740.333767
13	7668.103543	7682.705105	7697.320557	7711.949897	7726.593126	7741.250244
14	7669.015734	7683.618164	7698.234484	7712.864692	7727.508789	7742.166775
15	7669.927979	7684.531277	7699.148465	7713.779541	7728.424506	7743.083360

16ths	88′–0″	88′–1″	88′–2″	88′–3″	88′–4″	88′–5″
0	7744.000000	7758.673611	7773.361111	7788.062500	7802.777778	7817.506944
1	7744.916694	7759.591173	7774.279541	7788.981798	7803.697944	7818.427979
2	7745.833442	7760.508789	7775.198025	7789.901150	7804.618164	7819.349067
3	7746.750244	7761.426459	7776.116564	7790.820557	7805.538439	7820.270209
4	7747.667101	7762.344184	7777.035156	7791.740017	7806.458767	7821.191406
5	7748.584012	7763.261963	7777.953803	7792.659532	7807.379150	7822.112657
6	7749.500977	7764.179796	7778.872504	7793.579102	7808.299588	7823.033963
7	7750.417996	7765.097683	7779.791260	7794.498725	7809.220079	7823.955322
8	7751.335069	7766.015625	7780.710069	7795.418403	7810.140625	7824.876736
9	7752.252197	7766.933621	7781.628933	7796.338135	7811.061225	7825.798204
10	7753.169379	7767.851671	7782.547852	7797.257921	7811.981879	7826.719727
11	7754.086616	7768.769775	7783.466824	7798.177762	7812.902588	7827.641303
12	7755.003906	7769.687934	7784.385851	7799.097656	7813.823351	7828.562934
13	7755.921251	7770.606147	7785.304932	7800.017605	7814.744168	7829.484619
14	7756.838650	7771.524414	7786.224067	7800.937609	7815.665039	7830.406359
15	7757.756104	7772.442735	7787.143256	7801.857666	7816.585965	7831.328152

16ths	88′–6″	88′–7″	88′–8″	88′–9″	88′–10″	88′–11″
0	7832.250000	7847.006944	7861.777778	7876.562500	7891.361111	7906.173611
1	7833.171902	7847.929715	7862.701416	7877.487006	7892.286485	7907.099854
2	7834.093859	7848.852539	7863.625109	7878.411567	7893.211914	7908.026150
3	7835.015869	7849.775418	7864.548855	7879.336182	7894.137397	7908.952501
4	7835.937934	7850.698351	7865.472656	7880.260851	7895.062934	7909.878906
5	7836.860053	7851.621338	7866.396512	7881.185574	7895.988525	7910.805366
6	7837.782227	7852.544379	7867.320421	7882.110352	7896.914171	7911.731879
7	7838.704454	7853.467475	7868.244385	7883.035183	7897.839871	7912.658447
8	7839.626736	7854.390625	7869.168403	7883.960069	7898.765625	7913.585069
9	7840.549072	7855.313829	7870.092475	7884.885010	7899.691433	7914.511746
10	7841.471463	7856.237088	7871.016602	7885.810004	7900.617296	7915.438477
11	7842.393907	7857.160400	7871.940782	7886.735053	7901.543213	7916.365262
12	7843.316406	7858.083767	7872.865017	7887.660156	7902.469184	7917.292101
13	7844.238959	7859.007189	7873.789307	7888.585314	7903.395209	7918.218994
14	7845.161567	7859.930664	7874.713650	7889.510525	7904.321289	7919.145942
15	7846.084229	7860.854194	7875.638048	7890.435791	7905.247423	7920.072944

16ths	89′–0″	89′–1″	89′–2″	89′–3″	89′–4″	89′–5″
0	7921.000000	7935.840278	7950.694444	7965.562500	7980.444444	7995.340278
1	7921.927110	7936.768256	7951.623291	7966.492215	7981.375027	7996.271729
2	7922.854275	7937.696289	7952.552192	7967.421984	7982.305664	7997.203234
3	7923.781494	7938.624376	7953.481147	7968.351807	7983.236355	7998.134793
4	7924.708767	7939.552517	7954.410156	7969.281684	7984.167101	7999.066406
5	7925.636095	7940.480713	7955.339220	7970.211616	7985.097900	7999.998074
6	7926.563477	7941.408963	7956.268338	7971.141602	7986.028754	8000.929796
7	7927.490913	7942.337267	7957.197510	7972.071642	7986.959663	8001.861572
8	7928.418403	7943.265625	7958.126736	7973.001736	7987.890625	8002.793403
9	7929.345947	7944.194038	7959.056017	7973.931885	7988.821642	8003.725288
10	7930.273546	7945.122504	7959.985352	7974.862088	7989.752713	8004.657227
11	7931.201199	7946.051025	7960.914741	7975.792345	7990.683838	8005.589220
12	7932.128906	7946.979601	7961.844184	7976.722656	7991.615017	8006.521267
13	7933.056668	7947.908230	7962.773682	7977.653022	7992.546251	8007.453369
14	7933.984484	7948.836914	7963.703234	7978.583442	7993.477539	8008.385525
15	7934.912354	7949.765652	7964.632840	7979.513916	7994.408881	8009.317735

16ths	89′–6″	89′–7″	89′–8″	89′–9″	89′–10	89′–11″
0	8010.250000	8025.173611	8040.111111	8055.062500	8070.027778	8085.006944
1	8011.182319	8026.106798	8041.045166	8055.997423	8070.963569	8085.943604
2	8012.114692	8027.040039	8041.979275	8056.932400	8071.899414	8086.880317
3	8013.047119	8027.973334	8042.913439	8057.867432	8072.835314	8087.817084
4	8013.979601	8028.906684	8043.847656	8058.802517	8073.771267	8088.753906
5	8014.912137	8029.840088	8044.781928	8059.737657	8074.707275	8089.690782
6	8015.844727	8030.773546	8045.716254	8060.672852	8075.643338	8090.627713
7	8016.777371	8031.707058	8046.650635	8061.608100	8076.579454	8091.564697
8	8017.710069	8032.640625	8047.585069	8062.543403	8077.515625	8092.501736
9	8018.642822	8033.574246	8048.519558	8063.478760	8078.451850	8093.438829
10	8019.575629	8034.507921	8049.454102	8064.414171	8079.388129	8094.375977
11	8020.508491	8035.441650	8050.388699	8065.349637	8080.324463	8095.313178
12	8021.441406	8036.375434	8051.323351	8066.285156	8081.260851	8096.250434
13	8022.374376	8037.309272	8052.258057	8067.220730	8082.197293	8097.187744
14	8023.307400	8038.243164	8053.192817	8068.156359	8083.133789	8098.125109
15	8024.240479	8039.177110	8054.127631	8069.092041	8084.070340	8099.062527

16ths	90′–0″	90′–1″	90′–2″	90′–3″	90′–4″	90′–5″
0	8100.000000	8115.006944	8130.027778	8145.062500	8160.111111	8175.173611
1	8100.937527	8115.945340	8130.967041	8146.002631	8161.052110	8176.115479
2	8101.875109	8116.883789	8131.906359	8146.942817	8161.993164	8177.057400
3	8102.812744	8117.822293	8132.845730	8147.883057	8162.934272	8177.999376
4	8103.750434	8118.760851	8133.785156	8148.823351	8163.875434	8178.941406
5	8104.688178	8119.699463	8134.724637	8149.763699	8164.816650	8179.883491
6	8105.625977	8120.638129	8135.664171	8150.704102	8165.757921	8180.825629
7	8106.563829	8121.576850	8136.603760	8151.644558	8166.699246	8181.767822
8	8107.501736	8122.515625	8137.543403	8152.585069	8167.640625	8182.710069
9	8108.439697	8123.454454	8138.483100	8153.525635	8168.582058	8183.652371
10	8109.377713	8124.393338	8139.422852	8154.466254	8169.523546	8184.594727
11	8110.315782	8125.332275	8140.362657	8155.406928	8170.465088	8185.537137
12	8111.253906	8126.271267	8141.302517	8156.347656	8171.406684	8186.479601
13	8112.192084	8127.210314	8142.242432	8157.288439	8172.348334	8187.422119
14	8113.130317	8128.149414	8143.182400	8158.229275	8173.290039	8188.364692
15	8114.068604	8129.088569	8144.122423	8159.170166	8174.231798	8189.307319

16ths	90′–6″	90′–7″	90′–8″	90′–9″	90′–10″	90′–11″
0	8190.250000	8205.340278	8220.444444	8235.562500	8250.694444	8265.840278
1	8191.192735	8206.283881	8221.388916	8236.507840	8251.640652	8266.787354
2	8192.135525	8207.227539	8222.333442	8237.453234	8252.586914	8267.734484
3	8193.078369	8208.171251	8223.278022	8238.398682	8253.533230	8268.681668
4	8194.021267	8209.115017	8224.222656	8239.344184	8254.479601	8269.628906
5	8194.964220	8210 058838	8225.167345	8240.289741	8255.426025	8270.576199
6	8195.907227	8211.002713	8226.112088	8241.235352	8256.372504	8271.523546
7	8196.850288	8211.946642	8227.056885	8242.181017	8257.319038	8272.470947
8	8197.793403	8212.890625	8228.001736	8243.126736	8258.265625	8273.418403
9	8198.736572	8213.834663	8228.946642	8244.072510	8259.212267	8274.365913
10	8199.679796	8214.778754	8229.891602	8245.018338	8260.158963	8275.313477
11	8200.623074	8215.722900	8230.836616	8245.964220	8261.105713	8276.261095
12	8201.566406	8216.667101	8231.781684	3246.910156	8262.052517	8277.208767
13	8202.509793	8217.611355	8232.726807	8247.856147	8262.999376	8278.156494
14	8203.453234	8218.555664	8233.671984	8248.802192	8263.946289	8279.104275
15	8204.396729	8219.500027	8234.617215	8249.748291	8264.893256	8280.052110

16ths	91′–0″	91′–1″	91′–2″	91′–3″	91′–4″	91′–5″
0	8281.000000	8296.173611	8311.361111	8326.562500	8341.777778	8357.006944
1	8281.947944	8297.122423	8312.310791	8327.513048	8342.729194	8357.959229
2	8282.895942	8298.071289	8313.260525	8328.463650	8343.680664	8358.911567
3	8283.843994	8299.020209	8314.210314	8329.414307	8344.632189	8359.863959
4	8284.792101	8299.969184	8315.160156	8330.365017	8345.583767	8360.816406
5	8285.740262	8300.918213	8316.110053	8331.315782	8346.535400	8361.768907
6	8286.688477	8301.867296	8317.060004	8332.266602	8347.487088	8362.721463
7	8287.636746	8302.816433	8318.010010	8333.217475	8348.438829	8363.674072
8	8288.585069	8303.765625	8318.960069	8334.168403	8349.390625	8364.626736
9	8289.533447	8304.714871	8319.910183	8335.119385	8350.342475	8365.579454
10	8290.481879	8305.664171	8320.860352	8336.070421	8351.294379	8366.532227
11	8291.430366	8306.613525	8321.810574	8337.021512	8352.246338	8367.485053
12	8292.378906	8307.562934	8322.760851	8337.972656	8353.198351	8368.437934
13	8293.327501	8308.512397	8323.711182	8338.923855	8354.150418	8369.390869
14	8294.276150	8309.461914	8324.661567	8339.875109	8355.102539	8370.343859
15	8295.224854	8310.411485	8325.612006	8340.826416	8356.054715	8371.296902

16ths	91′–6″	91′–7″	91′–8″	91′–9″	91′–10″	91′–11″
0	8372.250000	8387.506944	8402.777778	8418.062500	8433.361111	8448.673611
1	8373.203152	8388.460965	8403.732666	8419.018256	8434.317735	8449.631104
2	8374.156359	8389.415039	8404.687609	8419.974067	8435.274414	8450.588650
3	8375.109619	8390.369168	8405.642605	8420.929932	8436.231147	8451.546251
4	8376.062934	8391.323351	8406.597656	8421.885851	8437.187934	8452.503906
5	8377.016303	8392.277588	8407.552762	8422.841824	8438.144775	8453.461616
6	8377.969727	8393.231879	8408.507921	8423.797852	8439.101671	8454.419379
7	8378.923204	8394.186225	8409.463135	8424.753933	8440.058621	8455.377197
8	8379.876736	8395.140625	8410.418403	8425.710069	8441.015625	8456.335069
9	8380.830322	8396.095079	8411.373725	8426.666260	8441.972683	8457.292996
10	8381.783963	8397.049588	8412.329102	8427.622504	8442.929796	8458.250977
11	8382.737657	8398.004150	8413.284532	8428.578803	8443.886963	8459.209012
12	8383.691406	8398.958767	8414.240017	8429.535156	8444.844184	8460.167101
13	8384.645209	8399.913439	8415.195557	8430.491564	8445.801459	8461.125244
14	8385.599067	8400.868164	8416.151150	8431.448025	8446.758789	8462.083442
15	8386.552979	8401.822944	8417.106798	8432.404541	8447.716173	8463.041694

16ths	92′–0″	92′–1″	92′–2″	92′–3″	92′–4″	92′–5″
0	8464.000000	8479.340278	8494.694444	8510.062500	8525.444444	8540.840278
1	8464.958360	8480.299506	8495.654541	8511.023465	8526.406277	8541.802979
2	8465.916775	8481.258789	8496.614692	8511.984484	8527.368164	8542.765734
3	8466.875244	8482.218126	8497.574897	8512.945557	8528.330105	8543.728543
4	8467.833767	8483.177517	8498.535156	8513.906684	8529.292101	8544.691406
5	8468.792345	8484.136963	8499.495470	8514.867866	8530.254150	8545.654324
6	8469.750977	8485.096463	8500.455838	8515.829102	8531.216254	8546.617296
7	8470.709663	8486.056017	8501.416260	8516.790392	8532.178413	8547.580322
8	8471.668403	8487.015625	8502.376736	8517.751736	8533.140625	8548.543403
9	8472.627197	8487.975288	8503.337267	8518.713135	8534.102892	8549.506538
10	8473.586046	8488.935004	8504.297852	8519.674588	8535.065213	8550.469727
11	8474.544949	8489.894775	8505.258491	8520.636095	8536.027588	8551.432970
12	8475.503906	8490.854601	8506.219184	8521.597656	8536.990017	8552.396267
13	8476.462918	8491.814480	8507.179932	8522.559272	8537.952501	8553.359619
14	8477.421984	8492.774414	8508.140734	8523.520942	8538.915039	8554.323025
15	8478.381104	8493.734402	8509.101590	8524.482666	8539.877631	8555.286485

16ths	92′–6″	92′–7″	92′–8″	92′–9″	92′–10″	92′–11″
0	8556.250000	8571.673611	8587.111111	8602.562500	8618.027778	8633.506944
1	8557.213569	8572.638048	8588.076416	8603.528673	8618.994819	8634.474854
2	8558.177192	8573.602539	8589.041775	8604.494900	8619.961914	8635.442817
3	8559.140869	8574.567084	8590.007189	8605.461182	8620.929064	8636.410834
4	8560.104601	8575.531684	8590.972656	8606.427517	8621.896267	8637.378906
5	8561.068387	8576.496338	8591.938178	8607.393907	8622.863525	8638.347032
6	8562.032227	8577.461046	8592.903754	8608.360352	8623.830838	8639.315213
7	8562.996121	8578.425808	8593.869385	8609.326850	8624.798204	8640.283447
8	8563.960069	8579.390625	8594.835069	8610.293403	8625.765625	8641.251736
9	8564.924072	8580.355496	8595.800808	8611.260010	8626.733100	8642.220079
10	8565.888129	8581.320421	8596.766602	8612.226671	8627.700629	8643.188477
11	8566.852241	8582.285400	8597.732449	8613.193387	8628.668213	8644.156928
12	8567.816406	8583.250434	8598.698351	8614.160156	8629.635851	8645.125434
13	8568.780626	8584.215522	8599.664307	8615.126980	8630.603543	8646.093994
14	8569.744900	8585.180664	8600.630317	8616.093859	8631.571289	8647.062609
15	8570.709229	8586.145860	8601.596381	8617.060791	8632.539090	8648.031277

16ths	93′–0″	93′–1″	93′–2″	93′–3″	93′–4″	93′–5″
0	8649.000000	8664.506944	8680.027778	8695.562500	8711.111111	8726.673611
1	8649.968777	8665.476590	8680.998291	8696.533881	8712.083360	8727.646729
2	8650.937609	8666.446289	8681.968859	8697.505317	8713.055664	8728.619900
3	8651.906494	8667.416043	8682.939480	8698.476807	8714.028022	8729.593126
4	8652.875434	8668.385851	8683.910156	8699.448351	8715.000434	8730.566406
5	8653.844428	8669.355713	8684.880887	8700.419949	8715.972900	8731.539741
6	8654.813477	8670.325629	8685.851671	8701.391602	8716.945421	8732.513129
7	8655.782579	8671.295600	8686.822510	8702.363308	8717.917996	8733.486572
8	8656.751736	8672.265625	8687.793403	8703.335069	8718.890625	8734.460069
9	8657.720947	8673.235704	8688.764350	8704.306885	8719.863308	8735.433621
10	8658.690213	8674.205838	8689.735352	8705.278754	8720.836046	8736.407227
11	8659.659532	8675.176025	8690.706407	8706.250678	8721.808838	8737.380887
12	8660.628906	8676.146267	8691.677517	8707.222656	8722.781684	8738.354601
13	8661.598334	8677.116564	8692.648682	8708.194689	8723.754584	8739.328369
14	8662.567817	8678.086914	8693.619900	8709.166775	8724.727539	8740.302192
15	8663.537354	8679.057319	8694.591173	8710.138916	8725.700548	8741.276069

16ths	93′–6″	93′–7″	93′–8″	93′–9″	93′–10″	93′–11″
0	8742.250000	8757.840278	8773.444444	8789.062500	8804.694444	8820.340278
1	8743.223985	8758.815131	8774.420166	8790.039090	8805.671902	8821.318604
2	8744.198025	8759.790039	8775.395942	8791.015734	8806.649414	8822.296984
3	8745.172119	8760.765001	8776.371772	8791.992432	8807.626980	8823.275418
4	8746.146267	8761.740017	8777.347656	8792.969184	8808.604601	8824.253906
5	8747.120470	8762.715088	8778.323595	8793.945991	8809.582275	8825.232449
6	8748.094727	8763.690213	8779.299588	8794.922852	8810.560004	8826.211046
7	8749.069038	8764.665392	8780.275635	8795.899767	8811.537788	8827.189697
8	8750.043403	8765.640625	8781.251736	8796.876736	8812.515625	8828.168403
9	8751.017822	8766.615913	8782.227892	8797.853760	8813.493517	8829.147163
10	8751.992296	8767.591254	8783.204102	8798.830838	8814.471463	8830.125977
11	8752.966824	8768.566650	8784.180366	8799.807970	8815.449463	8831.104845
12	8753.941406	8769.542101	8785.156684	8800.785156	8816.427517	8832.083767
13	8754.916043	8770.517605	8786.133057	8801.762397	8817.405626	8833.062744
14	8755.890734	8771.493164	8787.109484	8802.739692	8818.383789	8834.041775
15	8756.865479	8772.468777	8788.085965	8803.717041	8819.362006	8835.020860

16ths	94′-0″	94′-1″	94′-2″	94′-3″	94′-4″	94′-5″
0	8836.000000	8851.673611	8867.361111	8883.062500	8898.777778	8914.506944
1	8836.979194	8852.653673	8868.342041	8884.044298	8899.760444	8915.490479
2	8837.958442	8853.633789	8869.323025	8885.026150	8900.743164	8916.474067
3	8838.937744	8854.613959	8870.304064	8886.008057	8901.725939	8917.457709
4	8839.917101	8855.594184	8871 285156	8886.990017	8902.708767	8918.441406
5	8840.896512	8856.574463	8872.266303	8887.972032	8903.691650	8919.425157
6	8841.875977	8857.554796	8873.247504	8888.954102	8904.674588	8920.408963
7	8842.855496	8858.535183	8874.228760	8889.936225	8905.657579	8921.392822
8	8843.835069	8859.515625	8875.210069	8890.918403	8906.640625	8922.376736
9	8844.814697	8860.496121	8876.191433	8891.900635	8907.623725	8923.360704
10	8845.794379	8861.476671	8877.172852	8892.882921	8908.606879	8924.344727
11	8846.774116	8862.457275	8878.154324	8893.865262	8909.590088	8925.328803
12	8847.753906	8863.437934	8879.135851	8894.847656	8910.573351	8926.312934
13	8848.733751	8864.418647	8880.117432	8895.830105	8911.556668	8927.297119
14	8849.713650	8865.399414	8881.099067	8896.812609	8912.540039	8928.281359
15	8850.693604	8866.380235	8882.080756	8897.795166	8913.523465	8929.265652

16ths	94′–6″	94′–7″	94′–8″	94′–9″	94′–10″	94′–11″
0	8930.250000	8946.006944	8961.777778	8977.562500	8993.361111	9009.173611
1	8931.234402	8946.992215	8962.763916	8978.549506	8994.348985	9010.162354
2	8932.218859	8947.977539	8963.750109	8979.536567	8995.336914	9011.151150
3	8933.203369	8948.962918	8964.736355	8980.523682	8996.324897	9012.140001
4	8934.187934	8949.948351	8965.722656	8981.510851	8997.312934	9013.128906
5	8935.172553	8950.933838	8966.709012	8982.498074	8998.301025	9014.117866
6	8936.157227	8951.919379	8967.695421	8983.485352	8999.289171	9015.106879
7	8937.141954	8952.904975	8968.681885	8984.472683	9000.277371	9016.095947
8	8938.126736	8953.890625	8969.668403	8985.460069	9001.265625	9017.085069
9	8939.111572	8954.876329	8970.654975	8986.447510	9002.253933	9018.074246
10	8940.096463	8955.862088	8971.641602	8987.435004	9003.242296	9019.063477
11	8941.081407	8956.847900	8972.628282	8988.422553	9004.230713	9020.052762
12	8942.066406	8957.833767	8973.615017	8989.410156	9005.219184	9021.042101
13	8943.051459	8958.819689	8974.601807	8990.397814	9006.207709	9022.031494
14	8944.036567	8959.805664	8975.588650	8991.385525	9007.196289	9023.020942
15	8945.021729	8960.791694	8976.575548	8992.373291	9008.184923	9024.010444

16ths	95′–0″	95′–1″	95′–2″	95′–3″	95′–4″	95′–5″
0	9025.000000	9040.840278	9056.694444	9072.562500	9088.444444	9104.340278
1	9025.989610	9041.830756	9057.685791	9073.554715	9089.437527	9105.334229
2	9026.979275	9042.821289	9058.677192	9074.546984	9090.430664	9106.328234
3	9027.968994	9043.811876	9059.668647	9075.539307	9091.423855	9107.322293
4	9028.958767	9044.802517	9060.660156	9076.531684	9092.417101	9108.316406
5	9029.948595	9045.793213	9061.651720	9077.524116	9093.410400	9109.310574
6	9030.938477	9046.783963	9062.643338	9078.516602	9094.403754	9110.304796
7	9031.938413	9047.774767	9063.635010	9079.509142	9095.397163	9111.299072
8	9032.918403	9048.765625	9064.626736	9080.501736	9096.390625	9112.293403
9	9033.908447	9049.756538	9065.618517	9081.494385	9097.384142	9113.287788
10	9034.898546	9050.747504	9066.610352	9082.487088	9098.377713	9114.282227
11	9035.888699	9051.738525	9067.602241	9083.479845	9099.371338	9115.276720
12	9036.878906	9052.729601	9068.594184	9084.472656	9100.365017	9116.271267
13	9037.869168	9053.720730	9069.586182	9085.465522	9101.358751	9117.265869
14	9038.859484	9054.711914	9070.578234	9086.458442	9102.352539	9118.260525
15	9039.849854	9055.703152	9071.570340	9087.451416	9103.346381	9119.255235

16ths	95′–6″	95′–7″	95′–8″	95′–9″	95′–10″	95′–11″
0	9120.250000	9136.173611	9152.111111	9168.062500	9184.027778	9200.006944
1	9121.244819	9137.169298	9153.107666	9169.059923	9185.026069	9201.006104
2	9122.239692	9138.165039	9154.104275	9170.057400	9186.024414	9202.005317
3	9123.234619	9139.160834	9155.100939	9171.054932	9187.022814	9203.004584
4	9124.229601	9140.156684	9156.097656	9172.052517	9188.021267	9204.003906
5	9125.224637	9141.152588	9157.094428	9173.050157	9189.019775	9205.003282
6	9126.219727	9142.148546	9158.091254	9174.047852	9190.018338	9206.002713
7	9127.214871	9143.144558	9159.088135	9175.045600	9191.016954	9207.002197
8	9128.210069	9144.140625	9160.085069	9176.043403	9192.015625	9208.001736
9	9129.205322	9145.136746	9161.082058	9177.041260	9193.014350	9209.001329
10	9130.200629	9146.132921	9162.079102	9178.039171	9194.013129	9210.000977
11	9131.195991	9147.129150	9163.076199	9179.037137	9195.011963	9211.000678
12	9132.191406	9148.125434	9164.073351	9180.035156	9196.010851	9212.000434
13	9133.186876	9149.121772	9165.070557	9181.033230	9197.009793	9213.000244
14	9134.182400	9150.118164	9166.067817	9182.031359	9198.008789	9214.000109
15	9135.177979	9151.114610	9167.065131	9183.029541	9199.007840	9215.000027

16ths	96′–0″	96′–1″	96′–2″	96′–3″	96′–4″	96′–5″
0	9216.000000	9232.006944	9248.027778	9264.062500	9280.111111	9296.173611
1	9217.000027	9233.007840	9249.029541	9265.065131	9281.114610	9297.177979
2	9218.000109	9234.008789	9250.031359	9266.067817	9282.118164	9298.182400
3	9219.000244	9235.009793	9251.033230	9267.070557	9283.121772	9299.186876
4	9220.000434	9236.010851	9252.035156	9268.073351	9284.125434	9300.191406
5	9221.000678	9237.011963	9253.037137	9269.076199	9285.129150	9301.195991
6	9222.000977	9238.013129	9254.039171	9270.079102	9286.132921	9302.200629
7	9223.001329	9239.014350	9255.041260	9271.082058	9287.136746	9303.205322
8	9224.001736	9240.015625	9256.043403	9272.085069	9288.140625	9304.210069
9	9225.002197	9241.016954	9257.045600	9273.088135	9289.144558	9305.214871
10	9226.002713	9242.018338	9258.047852	9274.091254	9290.148546	9306.219727
11	9227.003282	9243.019775	9259.050157	9275.094428	9291.152588	9307.224637
12	9228.003906	9244.021267	9260.052517	9276.097656	9292.156684	9308.229601
13	9229.004584	9245.022814	9261.054932	9277.100939	9293.160834	9309.234619
14	9230.005317	9246.024414	9262.057400	9278.104275	9294.165039	9310.239692
15	9231.006104	9247.026069	9263.059923	9279.107666	9295.169298	9311.244819

16ths	96′–6″	96′–7″	96′–8″	96′–9″	96′–10″	96′–11″
0	9312.250000	9328.340278	9344.444444	9360.562500	9376.694444	9392.840278
1	9313.255235	9329.346381	9345.451416	9361.570340	9377.703152	9393.849854
2	9314.260525	9330.352539	9346.458442	9362.578234	9378.711914	9394.859484
3	9315.265869	9331.358751	9347.465522	9363.586182	9379.720730	9395.869168
4	9316.271267	9332.365017	9348.472656	9364.594184	9380.729601	9396.878906
5	9317.276720	9333.371338	9349.479845	9365.602241	9381.738525	9397.888699
6	9318.282227	9334.377713	9350.487088	9366.610352	9382.747504	9398.898546
7	9319.287788	9335.384142	9351.494385	9367.618517	9383.756538	9399.908447
8	9320.293403	9336.390625	9352.501736	9368.626736	9384.765625	9400.918403
9	9321.299072	9337.397163	9353.509142	9369.635010	9385.774767	9401.928413
10	9322.304796	9338.403754	9354.516602	9370.643338	9386.783963	9402.938477
11	9323.310574	9339.410400	9355.524116	9371.651720	9387.793213	9403.948595
12	9324.316406	9340.417101	9356.531684	9372.660156	9388.802517	9404.958767
13	9325.322293	9341.423855	9357.539307	9373.668647	9389.811876	9405.968994
14	9326.328234	9342.430664	9358.546984	9374.677192	9390.821289	9406.979275
15	9327.334229	9343.437527	9359.554715	9375.685791	9391.830756	9407.989610

16ths	97′–0″	97′–1″	97′–2″	97′–3″	97′–4″	97′–5″
0	9409.000000	9425.173611	9441.361111	9457.562500	9473.777778	9490.006944
1	9410.010444	9426.184923	9442.373291	9458.575548	9474.791694	9491.021729
2	9411.020942	9427.196289	9443.385525	9459.588650	9475.805664	9492.036567
3	9412.031494	9428.207709	9444.397814	9460.601807	9476.819689	9493.051459
4	9413.042101	9429.219184	9445.410156	9461.615017	9477.833767	9494.066406
5	9414.052762	9430.230713	9446.422553	9462.628282	9478.847900	9495.081407
6	9415.063477	9431.242296	9447.435004	9463.641602	9479.862088	9496.096463
7	9416.074246	9432.253933	9448.447510	9464.654975	9480.876329	9497.111572
8	9417.085069	9433.265625	9449.460069	9465.668403	9481.890625	9498.126736
9	9418.095947	9434.277371	9450.472683	9466.681885	9482.904975	9499.141954
10	9419.106879	9435.289171	9451.485352	9467.695421	9483.919379	9500.157227
11	9420.117866	9436.301025	9452.498074	9468.709012	9484.933838	9501.172553
12	9421.128906	9437.312934	9453.510851	9469.722656	9485.948351	9502.187934
13	9422.140001	9438.324897	9454.523682	9470.736355	9486.962918	9503.203369
14	9423.151150	9439.336914	9455.536567	9471.750109	9487.977539	9504.218859
15	9424.162354	9440.348985	9456.549506	9472.763916	9488.992215	9505.234402

16ths	97′–6″	97′–7″	97′–8″	97′–9″	97′–10″	97′–11″
0	9506.250000	9522.506944	9538.777778	9555.062500	9571.361111	9587.673611
1	9507.265652	9523.523465	9539.795166	9556.080756	9572.380235	9588.693604
2	9508.281359	9524.540039	9540.812609	9557.099067	9573.399414	9589.713650
3	9509.297119	9525.556668	9541.830105	9558.117432	9574.418647	9590.733751
4	9510.312934	9526.573351	9542.847656	9559.135851	9575.437934	9591.753906
5	9511.328803	9527.590088	9543.865262	9560.154324	9576.457275	9592.774116
6	9512.344727	9528.606879	9544.882921	9561.172852	9577.476671	9593.794379
7	9513.360704	9529.623725	9545.900635	9562.191433	9578.496121	9594.814697
8	9514.376736	9530.640625	9546.918403	9563.210069	9579.515625	9595.835069
9	9515.392822	9531.657579	9547.936225	9564.228760	9580.535183	9596.855496
10	9516.408963	9532.674588	9548.954102	9565.247504	9581.554796	9597.875977
11	9517.425157	9533.691650	9549.972032	9566.266303	9582.574463	9598.896512
12	9518.441406	9534.708767	9550.990017	9567.285156	9583.594184	9599.917101
13	9519.457709	9535.725939	9552.008057	9568.304064	9584.613959	9600.937744
14	9520.474067	9536.743164	9553.026150	9569.323025	9585.633789	9601.958442
15	9521.490479	9537.760444	9554.044298	9570.342041	9586.653673	9602.979194

16ths	98′–0″	98′–1″	98′–2″	98′–3″	98′–4″	98′–5″
0	9604.000000	9620.340278	9636.694444	9653.062500	9669.444444	9685.840278
1	9605.020860	9621.362006	9637.717041	9654.085965	9670.468777	9686.865479
2	9606.041775	9622.383789	9638.739692	9655.109484	9671.493164	9687.890734
3	9607.062744	9623.405626	9639.762397	9656.133057	9672.517605	9688.916043
4	9608.083767	9624.427517	9640.785156	9657.156684	9673.542101	9689.941406
5	9609.104845	9625.449463	9641.807970	9658.180366	9674.566650	9690.966824
6	9610.125977	9626.471463	9642.830838	9659.204102	9675.591254	9691.992296
7	9611.147163	9627.493517	9643.853760	9660.227892	9676.615913	9693.017822
8	9612.168403	9628.515625	9644.876736	9661.251736	9677.640625	9694.043403
9	9613.189697	9629.537788	9645.899767	9662.275635	9678.665392	9695.069038
10	9614.211046	9630.560004	9646.922852	9663.299588	9679.690213	9696.094727
11	9615.232449	9631.582275	9647.945991	9664.323595	9680.715088	9697.120470
12	9616.253906	9632.604601	9648.969184	9665.347656	9681.740017	9698.146267
13	9617.275418	9633.626980	9649.992432	9666.371772	9682.765001	9699.172119
14	9618.296984	9634.649414	9651.015734	9667.395942	9683.790039	9700.198025
15	9619.318604	9635.671902	9652.039090	9668.420166	9684.815131	9701.223985

16ths	98′–6″	98′–7″	98′–8″	98′–9″	98′–10″	98′–11″
0	9702.250000	9718.673611	9735.111111	9751.562500	9768.027778	9784.506944
1	9703.276069	9719.700548	9736.138916	9752.591173	9769.057319	9785.537354
2	9704.302192	9720.727539	9737.166775	9753.619900	9770.086914	9786.567817
3	9705.328369	9721.754584	9738.194689	9754.648682	9771.116564	9787.598334
4	9706.354601	9722.781684	9739.222656	9755.677517	9772.146267	9788.628906
5	9707.380887	9723.808838	9740.250678	9756.706407	9773.176025	9789.659532
6	9708.407227	9724.836046	9741.278754	9757.735352	9774.205838	9790.690213
7	9709.433621	9725.863308	9742.306885	9758.764350	9775.235704	9791.720947
8	9710.460069	9726.890625	9743.335069	9759.793403	9776.265625	9792.751736
9	9711.486572	9727.917996	9744.363308	9760.822510	9777.295600	9793.782579
10	9712.513129	9728.945421	9745.391602	9761.851671	9778.325629	9794.813477
11	9713.539741	9729.972900	9746.419949	9762.880887	9779.355713	9795.844428
12	9714.566406	9731.000434	9747.448351	9763.910156	9780.385851	9796.875434
13	9715.593126	9732.028022	9748.476807	9764.939480	9781.416043	9797.906494
14	9716.619900	9733.055664	9749.505317	9765.968859	9782.446289	9798.937609
15	9717.646729	9734.083360	9750.533881	9766.998291	9783.476590	9799.968777

16ths	99′–0″	99′–1″	99′–2″	99′–3″	99′–4″	99′–5″
0	9801.000000	9817.506944	9834.027778	9850.562500	9867.111111	9883.673611
1	9802.031277	9818.539090	9835.060791	9851.596381	9868.145860	9884.709229
2	9803.062609	9819.571289	9836.093859	9852.630317	9869.180664	9885.744900
3	9804.093994	9820.603543	9837.126980	9853.664307	9870.215522	9886.780626
4	9805.125434	9821.635851	9838.160156	9854.698351	9871.250434	9887.816406
5	9806.156928	9822.668213	9839.193387	9855.732449	9872.285400	9888.852241
6	9807.188477	9823.700629	9840.226671	9856.766602	9873.320421	9889.888129
7	9808.220079	9824.733100	9841.260010	9857.800808	9874.355496	9890.924072
8	9809.251736	9825.765625	9842.293403	9858.835069	9875.390625	9891.960069
9	9810.283447	9826.798204	9843.326850	9859.869385	9876.425808	9892.996121
10	9811.315213	9827.830838	9844.360352	9860.903754	9877.461046	9894.032227
11	9812.347032	9828.863525	9845.393907	9861.938178	9878.496338	9895.068387
12	9813.378906	9829.896267	9846.427517	9862.972656	9879.531684	9896.104601
13	9814.410834	9830.929064	9847.461182	9864.007189	9880.567084	9897.140869
14	9815.442817	9831.961914	9848.494900	9865.041775	9881.602539	9898.177192
15	9816.474854	9832.994819	9849.528673	9866.076416	9882.638048	9899.213569

16ths	99′–6″	99′–7″	99′–8″	99′–9″	99′–10″	99′–11″
0	9900.250000	9916.840278	9933.444444	9950.062500	9966.694444	9983.340278
1	9901.286485	9917.877631	9934.482666	9951.101590	9967.734402	9984.381104
2	9902.323025	9918.915039	9935.520942	9952.140734	9968.774414	9985.421984
3	9903.359619	9919.952501	9936.559272	9953.179932	9969.814480	9986.462918
4	9904.396267	9920.990017	9937.597656	9954.219184	9970.854601	9987.503906
5	9905.432970	9922.027588	9938.636095	9955.258491	9971.894775	9988.544949
6	9906.469727	9923.065213	9939.674588	9956.297852	9972.935004	9989.586046
7	9907.506538	9924.102892	9940.713135	9957.337267	9973.975288	9990.627197
8	9908.543403	9925.140625	9941.751736	9958.376736	9975.015625	9991.668403
9	9909.580322	9926.178413	9942.790392	9959.416260	9976.056017	9992.709663
10	9910.617296	9927.216254	9943.829102	9960.455838	9977.096463	9993.750977
11	9911.654324	9928.254150	9944.867866	9961.495470	9978.136963	9994.792345
12	9912.691406	9929.292101	9945.906684	9962.535156	9979.177517	9995.833767
13	9913.728543	9930.330105	9946.945557	9963.574897	9980.218126	9996.875244
14	9914.765734	9931.368164	9947.984484	9964.614692	9981 258789	9997.916775
15	9915.802979	9932.406277	9949.023465	9965.654541	9982.299506	9998.958360

INCHES AND SIXTEENTHS REDUCED TO DECIMALS OF A FOOT.

16ths	0″	1″	2″	3″	4″	5″	6″	7″	8″	9″	10″	11″	16ths
0		.0833333	.1666666	.2500000	.3333333	.4166666	.5000000	.5833333	.6666666	.7500000	.8333333	.9166666	0
1	.0052083	.0885416	.1718750	.2552083	.3385416	.4218750	.5052083	.5885416	.6718750	.7552083	.8385416	.9218750	1
2	.0104166	.0937500	.1770833	.2604166	.3437500	.4270833	.5104166	.5937500	.6770833	.7604166	.8437500	.9270833	2
3	.0156250	.0989583	.1822916	.2656250	.3489583	.4322916	.5156250	.5989583	.6822916	.7656250	.8489583	.9322916	3
4	.0208333	.1041666	.1875000	.2708333	.3541666	.4375000	.5208333	.6041666	.6875000	.7708333	.8541666	.9375000	4
5	.0260416	.1093750	.1927083	.2760416	.3593750	.4427083	.5260416	.6093750	.6927083	.7760416	.8593750	.9427083	5
6	.0312500	.1145833	.1979166	.2812500	.3645833	.4479166	.5312500	.6145833	.6979166	.7812500	.8645833	.9479166	6
7	.0364583	.1197916	.2031250	.2864583	.3697916	.4531250	.5364583	.6197916	.7031250	.7864583	.8697916	.9531250	7
8	.0416666	.1250000	.2083333	.2916666	.3750000	.4583333	.5416666	.6250000	.7083333	.7916666	.8750000	.9583333	8
9	.0468750	.1302083	.2135416	.2968750	.3802083	.4635416	.5468750	.6302083	.7135416	.7968750	.8802083	.9635416	9
10	.0520833	.1354166	.2187500	.3020833	.3854166	.4687500	.5520833	.6354166	.7187500	.8020833	.8854166	.9687500	10
11	.0572916	.1406250	.2239583	.3072916	.3906250	.4739583	.5572916	.6406250	.7239583	.8072916	.8906250	.9739583	11
12	.0625000	.1458333	.2291666	.3125000	.3958333	.4791666	.5625000	.6458333	.7291666	.8125000	.8958333	.9791666	12
13	.0677083	.1510416	.2343750	.3177083	.4010416	.4843750	.5677083	.6510416	.7343750	.8177083	.9010416	.9843750	13
14	.0729166	.1562500	.2395833	.3229166	.4062500	.4895833	.5729166	.6562500	.7395833	.8229166	.9062500	.9895833	14
15	.0781250	.1614583	.2447916	.3281250	.4114583	.4947916	.5781250	.6614583	.7447916	.8281250	.9114583	.9947916	15

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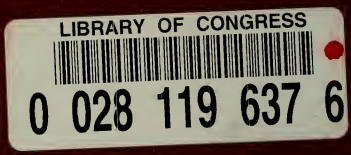
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